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DIVERSITY AND CIVIL RIGHTS ISSUES IN BROADBAND DEPLOYMENT AND ADOPTION

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Opening Remarks:

COMMISSIONER ROBERT MCDOWELL

Introduction:

MARK LLOYD, Moderator

Panelist Presentations:

What are the gaps in broadband access and adoption? And what is the best way to measure those gaps?

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President and co-founder of the Native American Broadband Association

CATHERINE SANDOVAL
Assistant Professor, Santa Clara University School of Law

JORGE REINA SCHEMENT
Dean of the School of Communication & Information and Professor II in the Bloustein School of Public Policy, and in the Department of Latino-Hispanic Caribbean Studies, Rutgers University

JIM TOBIAS
President, Inclusive Technologies

Panelist Presentations:

What does the law compel or limit regarding government action to close gaps in broadband access and adoption?

MARY FRANCES BERRY
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Panelist Presentations:

What works now to close the gap in broadband access and adoption?

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P R O C E E D I N G S

MR. LLOYD: Good morning.

MS. LEWIS: Good morning.

MR. LLOYD: We are running just a tad late, but we will catch up, and we've got a good, long day ahead of us.

My name is Mark Lloyd. At the moment, I'm not going to say much more than that, but I will introduce Commissioner Robert McDowell, who I first met when I was doing work on DTV, and here, at the FCC, we've sort of split between democratic and republican commissioners, but one of the things that I first noticed about Commissioner McDowell was that in DTV work, he actually called up the FCC to find out how they were treating consumers, and I was extraordinarily impressed with that, and I've known his assistant, Rosemary Harold, for a number of years, and we both go back to some extent to Wiley Ryan Fielding.

So, it is really a pleasure to introduce Commissioner Robert McDowell to this panel. Thank you, sir, for joining us.

MR. McDOWELL: Well, thank you, and thank you very much, Mark, for all your hard work on this issue in particular and putting together today's workshop. It's extremely important.

So, does everyone know what today is the 50th anniversary of? The airing of the Twilight Zone.

(Laughter.)

MR. McDOWELL: Now, driving, I was trying to figure out a segue to this panel on that, and I'm still working on it, but the relevance, but I thought that was sort of interesting. Hopefully, we can keep diversity and civil rights issues in broadband out of the Twilight Zone and well-grounded in reality. But I thought that was a little interesting trivia piece.

So, on Tuesday, SSC staffers working on the plan, of course, talked about many of the promises and challenges facing folks, such as us at the FCC policymakers all around, including those raised by the uneven levels of broadband

access and adoption by different demographic groups.

Yesterday, I held a panel on capital formation, and it only lasted an hour-and-a-half, where part of that is how can we get investment by entrepreneurs in the broadband space in all facets of the broadband space? We will be having an additional hearing or workshop on that. I don't know if we have a date for that yet, so, I'm not sure if I'm ready to make that announcement, but coming up soon. So, please stay tuned.

So, having access to capital, first of all, you have to have the capital to have access to. That was sort of the yesterday's hearing, and then what is the access to capital? What are the challenges there for that? So, please stay tuned because a lot of these issues aren't really about black, white, or brown. They could be resolved by the color green. And, so, I wore my green tie today to symbolize that. But whether you are building a broadband network or whether you are writing applications or whether you're a consumer

that would like to benefit from those technologies, then you need to buy a device.

Really, a lot of this boils down to money and resources and how are we going to be able to get these powerful technologies that can really improve the human condition so dramatically and so quickly? How do we get those resources into the hands of as many people as possible?

So, anyway, that is a big issue for us. We do have some good news. Of course, out in the marketplace, the use of wireless devices is high among demographic segments such as young, urban residents, but many in that group are not adopting more powerful laptop or desktop connections to the Net. And we need to find out why that is. And, obviously, cost is one of those factors. But does this group question whether more robust Internet access is worthwhile to them to begin with? And that has to do with getting the word out and education. So, information and money, I think, go hand-in-hand in this whole equation.

But I want to thank everyone in advance.

I don't want to blather on for too long because we want to hear from you all. I've got a lot going on today, as you can imagine, so, I'm not going to be able to stay for as long as I would like, but Rosemary Harold, my esteemed legal adviser for all things media and then some, it's a long title, but, anyway, will be here, as well, covering all this for me.

So, one of the things, when we submit a broadband plan to Congress, we're going to be talking about a lot of things that might be well outside of our jurisdiction. It's directly what the FCC can affect, but that's what Congress wanted. We're an expert agency on these matters. I think the chairman and his team have done a terrific job of casting the net as widely as possible and harvesting as much data as possible. There's relevant data and irrelevant data in there. There's good data and less-than-good data, so, obviously, we want relevant, good data, so, hopefully, today, we can start to drill down and focus on that.

But, also, when the FCC acts on something as a result of this broadband plan, I hope it will be sustainable. Pretty much almost everything we do, any order we issue we gets appealed by somebody, and that's the way our system works, and that's a healthy thing.

But, speaking of the Twilight Zone, we want to stay out of the Twilight Zone of overturned orders, if possible. So, I know they'll be some discussion of what's within our legal realm to do and what can do that will be sustainable because I think it's counterproductive. We want to dream big and push the envelope as much as we can, but we can actually end up taking steps backward and turning back the clock by sometimes years or decades if what we do ends up getting overturned and setting a bad precedent. And then we're sort of painted into a corner.

So, let's stay out of that Twilight Zone. I couldn't really find a better way to use that little factoid for the day.

But, anyway, thank you, all, so much. I will conclude at this point and really, we will greatly value everything you have to say, and this will be an ongoing discussion. This is certainly not the end of these very, very important issues. And thank you, Mark again for everything you're doing.

MR. LLOYD: Thank you, Commissioner. Thank you. So, the title of this program is "Diversity and Civil Right Issues in Broadband Deployment and Adoption." And if I could say just a couple of words, not much, but just a couple of words about both diversity and civil rights, and then see if we can get on to our panel.

When I or we at the FCC say "diversity," we are not talking about political ideology, we're not talking about race or ethnicity, we're talking about diversity. We're talking about all Americans and being as inclusive as possible. So, this is not an issue that we think is limited to one particular group, it's not a code word for black or Latino. Diversity means diversity.

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And when we say "civil rights," all Americans have civil rights. Commissioner McDowell has civil rights. I have civil rights. Lou Dobbs has civil rights. All Americans have civil rights. Civil rights lawyers understand this. Again, this is not a code word for some particular group or disability or political affiliation or anything else.

What do these issues, diversity, and civil rights really have to do with the FCC's work in creating a broadband plan, and my work here, I'm an associate general counsel at chief diversity officer. I am a counsel to the Commission. I do not set policy, but I work to advise policymakers on a range of issues with some expertise and concern about diversity and civil rights. And, like many Americans, I rush to find out if there was a way I could help a new administration, and I was allowed to do that not by President Barack Obama, who probably has no idea I'm even here, but by the chairman of the FCC, Julius Janikowski.

So, it really is an honor to be here to be able to work on these set of issues, and we will, as you see, have an extraordinarily diverse panel. We will discuss a range of issues. We've brought a number of really topnotch scholars. Some of them happen to be friends who are working on these issues. And we were also privileged to be join by a number of folks from the Federal Government.

Now, the role that we, in the government, play here really is a role as questioners to try to listen and to learn from the public. We really are here, and this is a session to listen.

Before I go too far down the road, I wanted to let you know that the person who's in charge of this room is a guy named Calvin Osborne.

Calvin, are you here somewhere? He is right behind you. So, if you need something, some direction, he's the one who's directing me. He is our in-room coordinator.

Christian Fiascunari is our online

coordinator. John Finney is working the timer for us and keeping us on track. We're a little bit late, but John's going to help us get back on time. And Corrin Barksdale is working the AV behind the desk there, sitting where usually the commissioner sits. So, she's very comfortable there, as you can see.

So, we've got really a very good team, and all these folks are from the Office of Communications and Business Opportunities, and Tom Reed and his office has really been very helpful in working with me, and really, that's the extent of my work here. I work with other folks. I don't have a gigantic office, and as I think David Honig said to one paper, I don't even have a corner office.

So, all that aside, we have an extraordinarily important day ahead of us. I hope that you can stay for most of it, and we will start really with the discussion of what used to be called information haves and have-nots. It was then called the digital divide, and we're now sort

of talking about it in terms of gaps of access and adoption to advance information technology.

My friend, Maureen Lewis, who is with NTIA, is going to be here to help me out.

John Horrigan, who was with Pew, and has left that wonderful organization to somehow join the madness here at the Federal Communications Commission will also be here. And I've asked John if he could sort of start us off with a set of slides and a presentation of sort of what do we know now regarding gaps in access and adoption for the different communities in the United States? And, so, with that, John Horrigan? Thank you.

MR. HORRIGAN: Thanks very much, Mark. It's a pleasure to be here. And I appreciate you giving me the chance to be on the panel today.

What I'd like to do is just go through a couple of slides to provide sort of a data overview of where we stand with respect to broadband adoption. So, let's just get right to it.

You can see that, according to a number

of different sources, including the Pew Internet and American Life Project, broadband adoption in the United States stands at close to two-thirds of Americans having a broadband Internet connection at home.

So, you can see across a couple different measurement techniques, a couple different sources, broad consensus said close to two-thirds of Americans have broadband at home. Looking at trend data over time, you can see that we passed for broadband adoption among adult Americans 50 percent sometime in 2007, and, actually, when you look at that rate of going from about 0 to 50 percent adoption is a fast adoption rate when you compare broadband with other kinds of information technologies. It's faster than it took the personal computer and cell phones to hit 50 percent, for instance.

So, certainly, people at a good rate have been adopting broadband over the past couple years. Of course, what remains to be seen is are we at an inflection point at that curve as we hit

that 63 percent point, and we can talk about that a little bit later, perhaps.

There are, as Mark said, however, significant gaps when you look across different demographic and socioeconomic categories. If you're among the least-educated Americans and among the lowest income Americans, you're about half as likely to have broadband at home than the national average. And really, education and income are the two strongest predictors of whether you have broadband at home.

Geography comes into play, as well, for Americans, many because of lack of access of infrastructure, have lower rates of broadband adoption, and you can see with respect to age, even though senior citizens are adopting broadband at a very fast rate, they remain about half as likely to have broadband at home.

Now, focusing on the bars that pertain to race, you can see that African-Americans and Hispanics significantly lag the national average. I should say for the 40 percent number for

Hispanics, that does come from a survey in which there was a Spanish language option, so, that is from a fairly good sample of Hispanic Americans. Forty percent of Hispanics have broadband at home. Forty-six percent of African-Americans. And, according to the Pew data, that figure for African-American adoption has remained about the same in the past two years. It's grown only 6 percentage points since 2007.

At the same time, and Commissioner McDowell alluded to this, African-Americans are really the most active group in using the mobile Internet. So, that represents an interesting crosscurrent. African-Americans plateauing to some extent on wireline broadband access, yet, rapidly embracing the mobile Internet.

The why behind that is really an open question, and it's something that we with a broadband plan here at the Commission plan to explore in the coming months as we develop the plan.

The figure there for Hispanics I should

say came from a survey in which there was not a Spanish language option, so, that context is important interpreting that number for Hispanics.

One thing we're very interested in at the broadband plan is what are the reasons behind non-adoption, and this just comes from some research from Pew that charted out why people say they don't have either Internet access or broadband access, and most people or about half of non-adopters site something pertaining to relevance.

Let me just move on since we have another slide or two before I conclude.

And this final slide highlights what we're calling the growing cost of digital exclusion, and what I mean by that, just to call out the employment example, is that we did talk a lot about the digital divide 10 years ago or so, and 10 years ago, if you looked for a job, if were embarking on a job search, you looked at ads and print publications, you probably activated your social networks. Some of the people in your

social network had e-mail, less than half, but if you were looking for a job and you didn't have Internet access, there were plenty of alternatives 10 years ago.

Today, the story is very different. Three-quarters of Fortune 500 companies as of 2005 said that they basically required online access in order to apply for a job.

So, these days, if you don't have broadband access, you're severely disadvantaged in a way that wasn't the case years ago. I (inaudible) to you the rest of that slide to look at other examples where not having broadband access is extremely costly and more costly arguably than it was 10 years ago. So, the cost of digital exclusion is an important point we're going to be digging into at the broadband plan, and I think it is worthwhile for all of us to think about today as we talk about these issues.

Thank you, Mark.

MR. LLOYD: Thank you, John. And I know you're going to stay here for a little while, but

just so folks in the audience understand that you have to leave a little bit early to go to Capitol Hill. So, thank you for being able to make this time for us at least.

MS. LEWIS: Sure.

MR. LLOYD: One of the challenges that we're facing is: How do you actually understand who is online, who is not online, why, why not? And, so, we're going to dig a little bit into these numbers, and I've asked my friend, Jorge Schement, who is dean of the School of Communications Information and professor at the Bloustein School of Public Policy and the Department of Latino-Hispanic-Caribbean Studies at Rutgers University to join us to give us a little sense of the swift change in demographics and how folks really construct their median communications environment?

So, with that, Professor Schement, please.

MR. SCHEMENT: Thank you, Mark. Thank you, everybody.

All right. How's that? I feel like Edward R. Murrow.

Thank you, thank you, all. What I want to talk about today is changes that we're all aware are taking place, but I'm going to suggest that there are some nuances to them that either we haven't expected or that are going to produce some consequences we're not currently thinking about, at least not in the policy arena.

So, I want to start out with a caution and a challenge.

My caution is that we have a tendency to talk about groups and very big swipes, large groups. I'm going to suggest that there's a tremendous amount of variation out there in terms of how people construct their information environments, either in their homes or their communities, and that that is going to have a bigger impact on the success of our policies in the 21st Century, and my challenge is that policy moves by metaphors. It's the metaphors we develop that cause us to understand policies or proposed

policies and that it's time for some new metaphors, and I'm going to indicate, I hope, why.

First, two very long trends that have been taking place in the United States since its beginning our now reaching their end. The first is the decline of the number of people per household. That's beginning to flatten out.

And the second is in the number of single person households. That's going to continue to climb for awhile, but, as it's going to reach a saturation point, as well. These are dynamic changes that completely change the nature of households. In the 20th Century, they are not going to be the driving changes in the 21st Century.

I also want to suggest that we have to start thinking of the household differently. Fifty-five percent of households do not include a married couple. Twenty-seven percent of households have only one person, and that percent continues to grow. Two-thirds of households do not have children, which explains, in part, the

difficulty in passing bond issues for things having to do with schools in many parts of the United States.

Seven percent of households are traditional. That is the working father, non-working mother with children. Any of you who grew up in that kind of household, it is only 7 percent of households today, and that percent continues to decline. And, of that percent, while 75 percent of the population in Anglo or white, only 60 percent of traditional households are. In other words, the traditional household is evolving out of being a predominantly white, middle-class profile into something else.

Here is the split as we see it. Geography is going to count. This map here shows you that a 300-year pattern of historical circumstances has placed Hispanics, for the most part, Latinos, for the most part, in the west and in Southern Florida. African-Americans across the southeast. That's beginning to change.

This map here shows you where the rates

of growth are for the Latino population in the coming decades, and they will be primarily in the southeast and in the Midwest. In other words, the southeast is going to become more multi-ethnic, and that's going to create some very interesting circumstances politically, economically, and culturally for people living in the southwest, and the same is going to happen in the Midwest.

Nevertheless, the most ethnically mixed part of the United States is probably going to be the southern tier. The northern tier is going to have less ethnic mixing than the southern tier. The southern tier is going to become linguistically mixed, ethnically mixed, culturally mixed. It's going to be a very different place from the place that, perhaps, we grew up in.

Immigration is going to play a big role. The key thing here, of course, is that the majority, that is over 50 percent of all the immigrants who come to the United States, come from Mexico, but the second largest group are Filipinos. I haven't heard anybody in Washington

talk about Filipinos in a long time. Yet, they're the second largest group, and there are more Germans coming to the United States than Chinese coming to the United States, even though we talk about a lot about Chinese immigration.

In my home state, the most common surname at graduation was the name Patel, and the second most common surname at graduation was the name Rodriguez. So, that gives you a sense of age tiers, also, as to who is moving up.

Regional variation by ethnicity is also going to be significant. That is, the majority of Latinos in the United States may be Mexican-Americans, but in a state like Pennsylvania, the majority are of Puerto Rican descent. That means different language characteristics, different dialogues, different food interest, and also different cultural and political patterns.

And to pursue the Pennsylvania example just a little bit further, the only sources of increased population for Pennsylvania in the last

decade and in the coming decade are from either immigration or from the birthrates of Latinos. Everybody else is of zero population growth or below.

So, that translates into cities that are going to look not the same, convergence is not going to be the characteristic of American cities, but divergence is going to be the characteristics.

Here are projected populations for Los Angeles and for Philadelphia. Philadelphia will have a significant Anglo population well into the 21st Century. Los Angeles' majority population is already Latino and will continue to be so. In fact, the rates of change in these charts are less than what we actually have observed.

All right, let's talk a little bit about technology use.

This is an overly-complicated chart. There's a graduate student who's going to get in trouble.

(Laughter)

MR. SCHEMENT: That breaks down

telephone penetration, and we're talking about telephones, right? Telephone penetration by income and by ethnicity.

Median income is everybody below median income, that is the 50 percent of households below median income actually make up two-thirds of that chart, and what we see in those tow-thirds is that even within the same income level, we still see ethnic disparities, we still see ethnic differences in access. So, it's not just about money; there's something else going on that prevents people in the same income group from having the same levels of access to information technology.

And telephone is important. I'm going to come back to that because I'm suggesting that we're not going to see levels of broadband access higher than levels of telephone access. So, the phrase when everybody's on the Internet is actually a hyperbole. It does not seem likely that that zone of people who don't have access to telephone are going to somehow get access to

Internet or broadband without having access to telephones. So, telephone is likely to be a significant barrier to increasing Internet access.

The following data comes courtesy of my friend, John Horrigan. It's very tiny. But what it is basically demonstrating is that Internet use varies not only by income, but also varies by ethnicity in the same way the telephone does. Here, as well, this is looking at what percentage of the population uses e-mail or accesses and then uses the Internet. Those red entries are differences in ethnicity. It turns out that just like with telephone, there are ethnicity differences even when we control for income.

The next one shows where the real catalyst for change is taking place, and that's in wireless telephony. Minorities are leading the way in terms of adopting wireless technologies. In fact, I would say to my colleagues in the phone companies they are your early adopters, therefore, their subsidizing everybody else. They're helping to create the network for everybody else who's

using it. So, maybe they deserve a break of some kind. It's just a thought.

And then here we have that percentage of the population that reports using a high-speed connection or broadband, it's much, much lower. We're talking in the middle range in the 50s, but, even there, we see some changes.

So, a point I've been trying to make here is that technology access is not something that is solely dependent on income. It is also dependent on aspects of ethnicity, but so is content.

So, what we see, and this is an old chart, and somebody's working on updating it for me. They didn't get it done in time. This is an old chart, but, nevertheless, it makes a point I want to make about using the Internet, as well as watching TV. The TV set can be turned on, Internet access can be achieved, but what people are doing on it is quite different. There's a tremendous amount of cultural diversity that takes place.

And this is what that cultural diversity results in. As you probably know, Americans buy more salsa than ketchup. They've been doing that for 25 years. They buy more corn chips and potato chips also for 25 years, and these foods that we see here are no longer identified as foreign foods by most Americans. Piñatas show up at in Anglos kids' birthday parties, and Anglos kids have learned to do what Mexican kids knew how to do 500 years ago, play with their tortillas.

So, the cultural is changing, as well. And then, finally, I just want to make a couple of quick points.

My bottom line point is this: We have increasingly become aware and spent time thinking about the diversity of who uses the technologies that we care about, such as telephone and broadband, but the policies we create act as if they're no differences. The policies we create don't take that into account at all. So, there is a big disparity moving into a century that is going to be more diverse than it's going to be

convergent for the population in the United States.

So, my final challenge is we need to think of some different metaphors and different ways of constructing policies that not only take this into account, but make life better for these folks.

Thank you very much.

MR. LLOYD: Great. Thank you, Jorge. An awful lot to think about.

I started out talking about the fact the diversity is not necessarily about color, and I've asked Jim Tobias if he could join us.

Jim has been working with the disabled community for a number of years and has been trying to find ways to promote inclusive technologies, and he has, I think, graciously come from not Washington, D.C., to join us and provide us with some information about how do we really measure the population that's increasingly getting older, and, to some extent, like me, maybe needing glasses and having some other challenges, and a

wide variety of other things that we call disabilities.

So, Jim Tobias, please.

MR. TOBIAS: Thank you, Mark, and thanks to the whole commission for this opportunity to speak here this morning. I think, to some, it may be a new demographic way of slicing the American public. If you think about disability, it may not be a condition that we all aspire to, but it's probably a condition that we all will enter if we're lucky enough to live long enough, we all see and hear at decreasing levels of effectiveness as we age. So, I want us to consider disability, and, therefore, accessibility as something that eventually will affect us all. So, it's not necessarily a separate category.

I just want to begin by looking at the current levels of adoption of both Internet and broadband. The top level numbers there show 65 percent adoption of the Internet in general across the public, and the bars below indicate for each disability category how much lower those numbers

are both for Internet adoption and for broadband adoption. So, you see with any disability whatsoever, the number drops rapidly already, and then looking at hearing impairment, visual impairment, cognitive impairment, and mobility impairment, those numbers are also very low. They're approximately half of the non-disabled population.

Slicing it the other way, looking at people who don't use the Internet now, 26 percent of them identify as having some disability. So, we have to wonder what is causing this. And we have some pretty good data, I think as the Commissioner mentioned before, and then we have some not so pretty good data, and I'm going to argue that we should improve our data collection and look both wider and deeper.

So, let's begin with the standard demographic factors that we already know predict low levels of adoption or non-adoption of Internet and broadband.

People with disabilities, if you see in

the chart here, compared to people without disabilities have much lower rates of employment, they have much lower household income. If you look at just the numbers of 100 percent poverty level or below, the people with disabilities are twice as likely to be in households with low income. And people with disabilities are, as I said, older. They're a small percentage of people age 21 to 64, but a much larger, more than one-third of the population 65 and older, and, obviously, as you go to 75 and 85, those numbers climb well above the 50 percent mark. Seventy-five percent, I think, is the number for people 85 years and older have some disability.

Educational attainment is also less than half of the non-disabled population with respect to having a college degree. So, these are the kind of standard factors that we see as predicting people who would not be certainly early adopters and might be non-adopters of broadband and Internet.

In addition, accessibility or disability

imposes its own burden, some of which are actual and some of which are perceived.

If we look statistically, people who find it difficult or impossible to use the Internet, 28 percent of non-users say that their disability makes the Internet difficult or impossible to use. Even people who use the Internet recognize that it impairs their ability to use it. Twenty percent of people who use the Internet say that their disability makes it hard to use.

So, this is a challenge not only to designers. If we could leave this burden at the designers' fluorescent-lit laboratory room, you go solve this usability and accessibility problem, I think we would have solved it a long time ago, and I'll talk a little bit more on this slide later about what I hope will echo Professor Schement's point about the narrative nature of non-adoption and how do people explain why they don't get the Internet and why they do get the Internet.

So, among the both real and perceived

issues that people with disabilities face, there was a certain amount of technological pessimism, and I think all of this can recall experiences where we tried something and it didn't work right the first time we tried an ATM or we tried to pump gas, self-serve gas into our car, something went wrong. The next time we try it, we're confronted by that situation, and maybe we've done our homework and caught up and figured out how to do it, or maybe we're a little more wanting to avoid those situations.

People with disabilities tend to confront those situations more often than people without disabilities, and, so, they develop what's called technological pessimism. They just assume that it's not going to be easy or it's not going to work for them, and I think we're seeing this definitely in the marketplace, and we're seeing it in "clinical settings," as well, where people are a little more reluctant to try new technologies.

And there was a narrative portion of this. You don't see people with disabilities

featured prominently in some of those glorious, glowing commercials about broadband and Internet access, it's always the on-to-go executive storming down the street or the kid Twittering to his friends and what have you a skateboard. People with disabilities are not featured there, and, so, "it doesn't seem like this technology is for me."

Then there's the very real issue of accommodations. In other words, if I'm a person with a disability, I may need a screen reader or a screen enlarger or just a larger monitor in order to see what's on the screen, and those accommodations can be not only expensive, but technologically complex. It may be hard for me to figure out how to use them, that genius 14-year-old neighbor that everybody has who helps fix the regular technology things that go wrong is probably not an expert in assistive technology, so, we need to figure out some way of increasing not only the awareness, but the ability to pay for those accommodations and to support those

accommodations.

So, I'm going to argue that what we really want to focus on in our studies is not, at least from the point of view of the communities of people with disability is not bandwidth per se, but related issues and some very unrelated issues. I think we want to focus on, as Professor Schement mentioned, the different TV shows people watch by ethnic category. I think we'll have the same data that we need to find out about the applications that people with disabilities are using on the Internet.

The issue of job applications makes my Spidey sense go all tingly. If Fortune 500 firms are relying on the Internet for people to apply, and if that application Web page is inaccessible, what does that do to limit people with disabilities access to those jobs? And if they have to go an alternate route and say if you can't fill out this form, dial this number, and talk to my secretary, they're pre-identifying themselves in a way that other applicants wouldn't be. So,

that's a little bit problematic.

I think we need to focus on that ecosystem approach. What are people on the Internet to do rather than how many bits are they using per minute over what portion of the day? I think we want to look at retention of broadband service. We have some very interesting studies of people who once had the Internet and now no longer do. Who's following those people to find out was that an economic issue or was it a usability issue, accessibility issue, couldn't find the applications that they wanted, couldn't find the accommodations that they needed?

There are some technological issues. I'll just mention one. Video telephony for sign language is a bandwidth-sensitive service, and it is very crucial service for native sign language speakers. So, we want to make sure that we're measuring and even requiring enough bandwidth for those households to be able to place not just one video call for sign language, but possibly several from the same household if there are many sign

language users within it.

And I'll close with just a couple of other research issues. My time seems to have gone faster than I anticipated, but I'll go through that anyway.

As you saw in the first slide where we split out the different disability categories, we need to keep that in mind, as well. People with disabilities are as diverse as any other population, even with respect to their disability. The technological needs, the market behavior of people who are hard-of-hearing is different from those who are deaf, is different from those who are blind, who have low vision. So, we need to slice that up a little bit more finely as I think we do within the other diverse communities that we're looking at.

Recruitment for the studies that we're going to do is essential, as well, to not just identify people through advocacy organizations or through the easiest research subjects defined are not in any way representative. They tend to

better connected socially, they tend to be earlier adopters of technology, stronger social networks, higher education attainment.

We need to reach out to the full width of those disability communities. And we need to look at, we have 30 years and more of experience in making technology accessible to people, and we need to look at those programs very carefully from a policy perspective and identify what works and what hasn't worked. How much can we count on families to help the elders in those families adopt and use technologies? How much can we rely on senior centers or gerontologists or speech therapists? How can we identify?

And there's an interesting study recently about hair salons as health maintenance monitors. That is if people were coming in the hair salon in slippers when they usually came in shoes, that was something like hey, maybe something's going on with my client here, and I want to make sure that she's okay and her household is working the way it needs to work, and

I think we can do some of that very intelligent light, regulatory touch in identifying some successful policy alternatives.

Thank you very much.

MR. LLOYD: Thank you. So, as you can see, this is an extraordinarily complex project. For the FCC to report to Congress to provide a broadband plan on providing access to all Americans, if we take all Americans seriously, we can see just with these first two presentations that it is not as simple as most Americans or quite as simple as we've been approaching it so far. I really appreciate the presentations and the suggestions.

One of the challenges Shana Bearhand at the FCC talks a little bit about this is that our relationship with original Americans is a little distinct. They are often very distinct political entities. And trying to get information about how to provide service to Native Americans is something of a challenge, and Shana introduced us to Mark Pruner, who is here, who is the cofounder

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or founder, cofounder or founder of the Native American Broadband Association, to give us some sense of what do we know about broadband service in Indian land and for Native Americans.

MR. PRUNER: Thank you, Mark. As you said, I'm the cofounder and president of the Native American Broadband Association. What we do is bring information to tribes about the Recovery Act Fund in the $7.2 billion and also bring information to you all and other government officials about the issues confronting Natives.

To follow-up on Commissioner McDowell's theme, we're the minority in the Twilight Zone. If you looked at all of the slides that were up there, there was only one slide that listed Native Americans, and that slide had no information about them. American Samoa, it's better tracked by the FCC than tribal reservations are.

So, let's take a look at the universe of Native American tribes. There are 563 federally-recognized tribes. That is a number that's in and of itself tends to cause problems

when government officials try to deal with tribes. They go how are we going to deal with 563 different entities? As a practical matter, they're probably more 160. Of the 563 tribes, 200 are them are native villages in Alaska; another 150 to 200 are very small also native villages in California and the west coast. In California, they're called Rancherias.

The one thing you see when you're dealing with tribes is that there are vast differences, both culturally and from a governmental viewpoint. The one thing that is common with many tribes is that they're remote. They're in the areas that the white settlers didn't want to have. They were either pushed there or they started there. So, because they're remote, they're out of sight, and they're also out of databases. And in a connected world, this compounds a digital divide. If you're not in the databases, you can't be part of the planning process.

If you look at Native tribes, the one

thing XXX BEGIN TRACK MZ000219 XXX that they all share is that they're all sovereign nations, and if you want to get a tribal leader's attention, say anything having to do with tribal sovereignty or that might potentially impact the tribal sovereignty.

Let's take a look at what data there is available. The best data generally comes from the Bureau of Indian Affairs, a division of the Department of Interior. They have very good, solid information about the location of reservations and the population.

The one caveat there is if you're dealing in Alaska, you really need have to have a Alaska expert because the Alaska Native Claims Settlement Act wiped out all tribes and all reservations in Alaska, with the exception of one. And up there, you have Native corporations and the Native villages that I spoke of.

Another issue is if you look at the Pew Web Site, you search for Indians, tribes, or Native Americans, nothing comes up. So, you can't

go to standard places to find information about Native Americans.

You take a look at FCC Form 477, and there's information there that includes information on Native Americans, but it's not mapped to reservations. So, you can't see what's going on, and that's a real issue because if you base it on census blocks, if you base it on ZIP codes, most reservations are surrounded by Anglo communities right on the other side of the border, so that if you have a ZIP code that crosses the boundary and you're trying to use that in place of actually researching the information from the reservation, you're going to pick up a lot of people in the non-Native community in that ZIP code or that census block.

The nice thing is the Department of Census is redoing the census blocks for Native Americans. They will in this next census be contiguous with the reservations. So, we should get some good, solid, Native American data out of that.

As I mentioned, one of the biggest problems is the whole out of sight, out of database problems. A classic example is that is the electrical grid mapping that was done. Many of the electrical lines ran up to the reservation, and then there's no data. It's a black hole, it's the Twilight Zone. And that means that people don't plan because they don't have the data for it.

My favorite one was the computer that was designed to improve the electrical grid. It saw this black hole, thought that it was some sort of geographical feature, and literally proposed the routing of the new lines right around the borders of the reservation, totally ignoring the fact that there were actual lines there and that they could cross the reservation.

The other thing that you want to be very sensitive of, and this is a big problem with the mapping, is tribes think of themselves as the equivalent of states, and under most federal laws, they are treated as states. So, you don't want to

go to a state and ask them to collect information from the tribe. That's what's being done with the national map, and we're working on that. We think we have a fix for it, but you're going to have a lot of upset Natives if you're expecting states to get information from tribes.

My favorite one that really gives statisticians in Washington weird looks on their faces is many of these reservations don't have street addresses. Where people are located, they don't have street names, and they certainly don't have street numbers.

There are at least two reservations I know where every individual on that reservation shares the same post office box. And in one of those cases, that post office box is not on the reservation.

So, once again, if you're doing it by ZIP code, you'd be looking at individuals that aren't even on that reservation.

So, what do we do and why do we care in the National Broadband Plan?

The reason is care is these are sovereign nations, they have been there for 200 years, they're going to be there, and they need to be dealt with.

Two, you look at the numbers here, and it cracked me up when I was looking at the numbers for any group you wanted to name. The broadband penetration in the Native community is estimated at 5 percent. The lowest number I saw up there was, I think, 20 percent for any other group, and most of the groups are over 50 percent. So, the group that most deserves efficient and effective planning from the FCC, and you don't need to work with 563 entities. There are tribal associations; there are 20 of them that cover 98 percent of all of the tribes, and they're very useful to work with.

In addition, this is a crucial year. We've got four months before the national broadband comes out. We've got 11 months left for the $7 billion in the BIP and BTOP funds to be allocated to the primarily rural areas. The

networks that were put in originally, the railroads and the electrification networks are still where they were put in in 1870 and 1930. So, what gets done this year and funded this year is going to be there for the next 30 to 40 years. So, for Natives, this period of time over the next four months with the FCC and over the next 11 months with the NTIA and the Rural Utility Service that are funding those programs is absolutely crucial for us.

So, I thank you for your time.

MR. PRUNER: Great. Thanks, Mark. Professor Catherine Sandoval has been working on a wide variety of issues in media and telecom for a few years. She's not that old. Certainly not as old as I am. And she actually was here, I don't know, just a few weeks ago, and started a presentation. We had done it at night and Professor Sandoval clearly had much more to say, and, so, we sort of worked both on this presentation, which she helped me with greatly and just sort of helping to sort of think through what

we ought to be looking at, and I've asked her to sort of bat cleanup here and to give us some sense of the challenges. And we've, I think, gotten a pretty clear sense of that, but challenges both related to language and the sort of new technologies that folks are adopting.

So, Professor Sandoval?

MS. SANDOVAL: Thank you. Thank you very much, Mark, and thank you to the whole team for putting this together. I know that there were also many advisors who were instrumental in this hearing and making sure that the FCC, as we're looking at broadband, really puts front and center the issues of diversity.

So, I wanted to talk a little bit about some of the access gaps, and then also how this ties in with some of the issues about other technologies and looking at are these other technologies complements to wireline or cable, terrestrial, if you will, broadband or are they substitutes?

So, when we've talked about access gaps,

we've discussed some of the different categories. So, one of those categories would be rural, and within rural, my colleague here, Mr. Pruner, I think has identified some very important issues with regard to Native Americans, but there's also a huge number of Native Americans who are urban, and in the State of California --

MR. PRUNER: I didn't have time for that part.

MS. SANDOVAL: Right, exactly. In the State of California, I'm a member of the Board of Expert Advisors for the California Emerging Technology Fund, and, so, one of the groups that we've identified as having very low levels of Internet access overall, but also broadband access, is Native American tribes, and, of course, there are issues both in the tribal lands, but also urban issues, and, so, I'll also be talking about some of the urban issues.

So, we've talked about other categories, income, education, language, non-English-speaking race, ethnicity, age, and disability, and, of

course, many of these things often overlap.

So, in talking about rural, so, one of the issues, as well, about rural gaps is also how rural is defined. And in states like California, this creates a lot of problems because many of the federal rules basically exclude areas that contain certain major cities, and my colleague, Professor Al Hammond, has done a lot of work on this particular issue.

So, for example, in central California, because of the size of the City of Fresno, most of the rural areas around it are excluded from the definition of rural. Although, if you went there, what you would see is people picking strawberries and picking other crops in the field, and very, very quickly, you get into extremely rural areas that are farmlands, but, yet, because of their proximity to Fresno, they are not defined as rural, and, therefore, become ineligible for certain types of rural support.

So, we need to really look at those distinctions, and, so, I'm looking at the example

of California in part because I'm from Los Angeles and now live in the Bay Area, but, also, we've been looking at these issues.

So, for example, in the San Joaquin Region, where Fresno is, 285 communities in that area lack any broadband access apart from mobile access, and even in what we call the Inland Empire by San Bernardino, there are 189 communities that also lack broadband access, but, again, are not counted as rural because of the presence of San Bernardino in San Bernardino County.

So, the other piece, when we look at areas where there are basically availability gaps, and, so, one part of the availability gap is rural. So, a lot of that is about build out. They're too far from the DSL headend to be able to get DSL. Cable was never built there.

And, in the case of Native Americans, I think that there are a number of issues that actually are involved with that, as well.

I used to be the undersecretary for the State of California's Business Transportation and

Housing Agency, and one important thing on the transportation side is, for example, in the County of San Diego, there are more Native American tribes in the County of San Diego than there are cities in the County of San Diego. And, so, basically what happens with this state is that the state allows the localities, usually the county, to have a vote in how some of the highway money will be used within the state. And, so, the County of San Diego decided that they didn't want to give the tribes a vote because, guess what, there are more tribes than there are cities, so, the tribes could outvote them.

So, the tribes are an advisory committee, and, so, naturally, when the county decides how it's going to spend its money, the top priority of the county is not improving highways to tribal areas. So, it's structurally designed so that they can outvote the tribes. They do that by not giving the tribes a vote. But what happens is that often telephone poles follow highways. If there are no telephone poles, then you can't get

DSL. If there are no telephone poles, you don't have the ability to do the attachments that are important for cable. And, so, you'd end up without cable. And, so, there are a lot of issues about why deployment doesn't happen, and, so, we need to take this holistic look at this range of issues. And the same thing happens in some of these other areas that are farm-working areas or other types of rural areas.

And then I'm also very concerned about some of the laws some of the states have passed that allow video franchises, which I think will bring about good things, but have no requirements or very limited requirements for build-outs to low-income communities. So, the question is: Will we see that investment in the future?

So, on the one hand, we have these availability issues which are really critical, and then, on the other hand, you have adoption issues. So, one of the things that the Public Policy Institute of California and California Emerging Technology Fund have found is that the county in

California with the lowest adoption rate for broadband and for Internet as a whole is Los Angeles; the second largest city in the nation, the largest city in California, where only 48 percent of the residents have Internet access at home.

So, this is largely not a problem of is the infrastructure available, but issues of affordability and other issues which affect adoption. So, I'll talk about that.

So, issues driving access gaps. One, lack of a computer. So, do you have a computer at home? So, this is some of the data, and I apologize, there wasn't data available on Native Americans that I could find easily.

MR. PRUNER: There isn't.

MS. SANDOVAL: Right, there you go. So, this shows you some of the data on people with computers at home, and, so, I imagine if we were able to go granularly into the age of the computers, that there might be huge difference there. And, so, we see a big difference in terms

of just physical lack of computers, and then once you get in addition of the lack of computers, there's also a lack of knowledge about computer use and Web use and its benefits. And when you do surveys, there are also a number of concerns that people have when you talk to non-users.

So, again my colleague, Professor Hammond, along with Professor Rafael at Santa Clara, did some surveys talking to individual community members about what their concerns were with regard to the Web and why they didn't have access or what they also wanted in a proposal within the Silicon Valley to do a wireless network, and chief among the concerns were about computer safety, right? Privacy. They're concerned about privacy, they're worried about identify theft, and they're also worried about the content that a computer might bring into the home, including pornography. And, so, educating people about filters, how to use filters, but also how do you manage these issues? Is part of dealing with the fear and real concerns about what computer use

will bring, but there's also a lack of knowledge of the benefits, and I think one of the things that's important is to make sure that, as the FCC investigate these issues, that the FCC doesn't simply ask people who are already online well, what do you think broadband is and what do you think are the barriers to getting even better broadband? You also have to ask people who are not online.

So, in the State of California, we've been having meetings in six different languages asking people what the barriers are, and, so, that kind of in-language discussion is going to very important.

So, this emphasizes some of those issues, and basically this data has been replicated, as well, in the national level.

So, in California, we found that while 83 percent of English-speaking Latinos use the Internet, only 31 percent of California non-English-speaking Latinos use the Internet, and only 17 percent subscribe to broadband. And,

again, the question that you ask is also very important. If you ask somebody do you subscribe to broadband? Well, first of all, the FCC is spending a lot of time trying to figure out what broadband is and how we should define it. And, so, that assumes that even the government knows what broadband is, let alone that the person knows what broadband is.

And one scholar sent me a study that he was working on south Texas, which is where Professor Schement is from. In the Harlingen area, to found out about the state of Internet access, they did some door-to-door research, knocking on doors, talking to people in Spanish, and the first question they asked was not: Do you have broadband, not: Do you use the Internet, the first question was: Do you know what the Internet is? So, we need to think about how we frame the question in talking to the community.

So, the same gap has been documented by Pew at the national level, so, this is not just a fluke of our state, but it's also a national

issue, and Pew has also documented similar gaps for African-Americans, non-high school graduates, people with low incomes, and then also people with disabilities, right. And then as you add onto disability language issues, rural issues, race and ethnicity issues, all of these issues can pile on.

So, one of the things I was speaking to John Horrigan about earlier was the importance of data sources, including Pew, but also the FCC making sure that as we're looking at the broadband issues, that we don't just survey in English and that we don't try to characterize the English-speaking world as America because America is increasingly diverse, so, we need to reach out in other languages, and also look at the computer issue, and then I want to close by talking a little bit about the wireless use issue.

So, as has been discussed, Latinos and African-Americans do have high levels of wireless use, and minority communities are more likely to also be cell phone only households, but even though some of the surveys are showing that

Latinos are more likely to use the cell phones for e-mails and Web than are Anglo households, this also doesn't mean that this is necessarily the solution to the broadband problem.

This gets back to what I was saying about looking at complements, not substitutes, because part of the issue is that especially for cell phones, there are many limitations on bandwidth, much more limited availability of bandwidth and a lot of rules that the Internet service provider imposes on bandwidth consumptions. Some ISPs decide what applications you can download. A fundamentally different concept of the Internet.

I think it's different, but it's not what most of us think about with regard to Internet. Most wireless companies prohibit attaching a computer. So, you have device attachment prohibitions. Some allow computer attachment for extra fees, and, so, these device attachment issues come into play. And, so, there are a number of issues that really indicate that

these technologies are complements and not substitutes.

And then, also, I think when we look at barriers that we need to be talking about issues about access to credit. So, for some services, you need a credit card or you need good credit to be able to get access to the services. So, as we've talked about with income, let alone what's happening with the recession, people who are losing their houses are going to have terrible credit.

So, one reason I think that Latinos and African-Americans have such high levels of wireless use is because the availability of prepaid wireless where credit is not an issue. So, we're just starting to see the emergence of prepaid Web, and, so, prepaid Internet, and I think that that's going to be critical.

So, I think I'll end there. I talked about the access to credit, so that the FCC needs to identify and report on these access gaps, but also to look at different types of Internet access

and not say well, just because you're able to on a two-inch screen access your e-mails, that doesn't necessarily mean that we've solved the broadband problem because we have to differentiate between what products are really complements and what products are substitutes.

Thank you.

MR. LLOYD: Thank you, Professor Sandoval. Really an awful lot of data that we're sort of throwing at you. The first session really is about what do we know, and then we'll get to other questions about what we can do about it. But we are giving you a lot of data and sort of demonstrating the really true complexity of the first task here.

Maureen Lewis, who is with NTIA, I know Maureen has a couple of questions, but NTIA has played, I think, an important and special role in identifying even the terms information has or have-nots or the digital divide, and, Maureen, if you could talk a little about that role.

MS. LEWIS: Sure.

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MR. PRUNER: And I'm also going to surprise you hear a little bit. If you could talk about your role in pushing 706 of the 1996 Telecommunications Act.

MS. LEWIS: Thanks very much, Mark. It's really a pleasure to be here among so many veterans of the sort of digital divide wars, and I go back some ways with some of the panelists here and some of the audience members back when I was with the Alliance Republic Technology, pushing for the FCC's implementation of Section 706 to promote the deployment of ubiquitous broadband access to the home.

I met some of my colleagues here today, and, so, while I'm saddened that we're still talking about the fact that there are so many access gaps in America and that we're still working very hard to close those gaps, I'm really pleased to be here to represent the National Telecommunications and Information Administration, which is the president's advisor on telecommunications policy, and, as you know,

President Obama is very committed to making sure that the gaps that we've been talking about here are closed.

So, one of the things that I'm doing in concert with my colleagues at NTIA, we're working very hard to implement the broadband technology opportunities program, which is a grant program which gives the opportunity for a number of different entities, non-profits, state and local governments for-profit entities. NTIA has been allocated up to $5.2 billion for broadband projects to promote the deployment of broadband infrastructure to un-served and underserved areas. We're also going to be providing grants to help establish or expand public computing center capacity, as well as to promote the adoption of broadband technologies.

In addition, NTIA is working to provide grants to the states to allow states to map their broadband access to help in the development of a national broadband map. So, we're working very closely with our colleagues at the Federal

Communications Commission, and it's really a pleasure to be here, and I do have a couple of questions that I'd like to ask, if I could.

One of the things that I guess I heard Mr. Tobias mention was this whole idea of technology pessimism, and you talked about it being high among the disabled community, but it struck me as you talked about it that the income gaps and the language gaps and the education gaps, those are also probably areas where people who are struggling to survive are experiencing technology pessimism, and I wondered if any of the panelists wanted to speak to that, and whether or not also you are aware of any studies that might have been done that demonstrate once exposed to broadband and broadband applications that the high-level of concerns about relevance change.

MS. LEWIS: I think it's a very important issue because I think it cuts across all of the adoption lowering factors. I really think it is a generic -- and consumer research over the years, especially the typology of Everett Rogers

with the innovator, early adopter, et cetera, and then unnecessarily negative term laggard, which I don't know, I mean, there are probably reasons for people not to adopt technology.

So, we need to be clear that we shouldn't be at an evangelical mode, but I agree. I think that diving into some of those questions about relevance, I don't think it's just us, and I think we're probably more early adopters here in this room than not.

It's not just our enthusiasm about these capabilities that's really transformed transformational technology that projects on to non-adopters what's the matter with you folks? I really think there is something there, and I think we need to dive into it. It is, I think, much more a cultural issue, a personal psychology issue, a lifestyle issue, and a social network issue, all right. People who don't have a lot of friends who use the Internet don't hear about how good it is in ways that would encourage them to adopt it. So, just to find out more about it and

then to look at the -- again, I'd like to emphasize a light touch regulatory regime that would encourage dissemination, induced dissemination rather than enforced, mandatory usage.

MR. PRUNER: I think Jim's right. In the Native American community, we see just the opposite. The Native public media, which is the one place that you can get some information, they run their operation on a shoestring, but they do have valuable information. Has shown that when Natives have the opportunity to get broadband and to use the Internet, they adopt it and they adopt it quickly. Part of that is cultural, as you were talking about. Is the fact that Native Americans have always been great storytellers, and they also like to create art. Both of those things they enjoy doing in a multimedia manner, and we see lots of that.

My favorite story was Wednesday, we met with NTIA and RUS about the provisions having to do with Natives, and we notified tribes on Friday

because this area is moving so quick. Three people flew all the way from Barrow, Alaska, the very northern point in Alaska, took them 24 hours to get there to Washington, and she was telling us about how Internet service is used there, it's satellite-based. Sixty-five percent of the people in this remote, native village use the Internet, and it's not a very high income area, but when they have to make a choice between having running water and having Internet service, they pick the Internet service.

MS. LEWIS: Wow. I think, also, that not all of these issues are demand side, that there are some things that the supply side is doing that also sometimes can thwart access or accessibility.

So, one example of that, when I was here about a month ago, I was on the Metro, and I saw an advertisement for this particular company that was advertising unlimited Web, text, and phone, and I wrote a paper recently called "Disclosure, Deception, and Deep Pocket Inspection," which

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(inaudible) is going to publish, and part of what I argue is that carriers should not be able to advertise their Internet service as unlimited if it's not actually unlimited. And it's very important to disclose to people what are the material limits, especially when you're placing material limits on applications, let alone device attachment, et cetera.

So, I took down the name of the company and then when I got back to California, I went into their Web Site and called it up. Well, my 14-year-old niece a couple of years ago, I had hired her to help me get my files in better order, and I was watching her work on the computer, and she did this little zoom thing and it made everything bigger. I said, oh, my God, how did you do that? All right, so, she shows me how to use the zoom button, thank God as I get older. But now I learned from my niece how to use the zoom button.

And, so, this print was so small, and I thought well, I know the magic button; I'll use

the zoom button. Guess what, it wouldn't let me zoom it to make it bigger, and especially because they had all this unlimited, and then there was this really small print, and I thought I'll just zoom it and make it bigger. They disabled that. You couldn't make it bigger, which certainly has huge issues for people with disabilities. Okay, I can see with glasses, let alone my aunt who really needs the print to be this big, but it also creates huge issues for just consumer information.

And, so, I think it's easy to say oh, it's a demand side, people don't know or whatever, but we also have to look at what is happening on the supply side that also thwarts use and creates this discouragement?

I also wanted to ask the panel, as NTIA looks to resume some of its research on closing the digital divide, what other areas ought we be focusing on? I mean, certainly Mark talked about making sure that we work to identify gaps in the Native American community.

NTIA has worked with the Census Bureau,

a sister agency of the Commerce Department, to gather data on Internet use and availability. So, are there some other areas that within the context of a digital divide study that we ought to be really focusing on where we can get more fine-tuned information?

MR. SCHEMENT: I have two, quick suggestions. One is in the early 1980s, when I first started looking at data that had to do with the relationship between income, ethnicity, and access to the telephone, I saw these gaps even within the same income range, and I couldn't explain them. So, now, it's 25, going on 30 later. I still can't explain them. We still don't understand why these kinds of gaps persist, and there are answers.

And, so, I would say one is, to the extent that NTIA can get a better handle on that, then they can make some progress on closing the gaps.

The second thing is that we talk about access, and here is an example of I think the

failing of policy. We talk about access as if it is the final goal, when, in fact, the technology is a very complex technology that also requires skills, competencies, and a basis for understanding them.

I understand that it's very difficult for one agency to cooperate with another agency, but I would hope that in the 21st Century, when we talk about access, we also talk about education and we also talk about the social capital needed to make something of it.

And let me tell you why I think it's important. In telecommunications and telecommunications economics, we have relied for many years on a concept we call the theory of network externalities. And that means that, as you add more people to the network, the network becomes more valuable to the people who are already on the network because they have more opportunities to connect. What we are beginning to understand about Internet networks are that it isn't just about whether you're connected to the

network, it's about the innovation that takes place on the network. The business model of the Internet doesn't produce content that you consume, it sells content you produce. Right? That's how YouTube, that's how all of these business models function. They're counting on you to produce the content.

So, the theory of network externalities in the Internet Age should probably be called the theory of dynamic network externalities because it is what we bring to it that gives the network its value, therefore, we want all these people who aren't connected to bring something to it because the changes are what they have to offer is not what we've been bringing to the network; there are other things out there on the network that's going to make the network more valuable.

So, for those reasons, I think the stakes are high.

MS. SANDOVAL: And I think, also, just doing focus groups, as Professor Schement is suggesting, with the non-users to find out about

barriers, it's very important to do that in a variety of languages, to also make those accessible, look at a variety of groups where we've identified some of the gaps, that that's absolutely going to be critical.

And then NTIA has long been a leader also in looking at traditional media, what we'd call now traditional media like broadcasting. Over 90 percent of Americans still use radio for news and information and reliance on radio is even higher for African-Americans and for Latinos, and there are a number of tribes that also have commercial and non-commercial radio stations.

So, radio and television continue to be a very important media, especially for a lot of communities that do not have access to computers, and, so, we have to think, again, about complements, not substitutes, and how can these work together?

I've been doing a study on minority radio broadcasters. I've identified approximately 325 different minority owners of approximately 850

minority-owned radio stations, about 72 percent of those are programmed specifically to serve minority communities. So, there's a very high relationship between minority ownership and content, and about 300 of them have very active Web Sites, and, so, we see the broadcasters are leveraging into the Internet, but, also, they're long-trusted voices who may also be able to help leverage access in the communities and know what's going on to be able to help in that assessment and to improve access to a variety of technologies.

MR. PRUNER: Yes, and a couple of quick points on that.

Professor Sandoval is right, Native public media is called that because those are the Native radio stations, and the woman there has done a wonderful job of reaching out beyond that.

The other thing, I think one of the reasons Natives are often left out is they're remote, and the survey costs are expensive. So, while you were talking about don't survey broadband people who are already on the Internet

necessarily, if you have no data, some data is better than none. So, a bottom-up approach with a Google mash-up with longitude and latitude-based data as proposed to stress address data where the people can get involved.

Professor Schement was talking about network externalities. Bob Metcalfe has Metcalfe's law, that the power of the network is the square of the numbers of users. He and I got into a discussion as to who first used the word "Internet" many years ago, and, so, if he has a lock, I could have Pruner's paradigm, which is that when you have two communities on and off the reservation, if you multiply the penetration rate times the speed in each community and then look at the difference, that's the harm that's being done in that community. So, you might look, because if one area doesn't have the bandwidth and the uses that the other area has, both communities are hurt because they're common, economic unit. So, that's another thing to look at is how the surrounding communities are being affected.

MR. LLOYD: So, we have a number of questions from the audience, both the online audience and the audience in front of us. We have almost a half hour, actually, to try to get through some of these, and I'm going to ask, to the extent possible, short answers, but some of these are some tough questions.

There was a question that I can answer, and that was: Will slide presentations be available online? And they will be available online.

Let me also say that Dr. Nicole Turner Lee was here to present I think a couple of sessions ago, and the Joint Center for Political Studies has some really very good poll data online about particularly the African-American use of broadband, and I believe those studies are both online on our Web Site and also on the Joint Center for Political and Economics' Web Site, as well.

A couple of questions here. What happens to immigrant data, and are they

incorporated into the demographics for other populations? And, so, we have data for African-Americans, do we have African-American immigrant data? We have --

MR. PRUNER: Actually, we think of you all as the immigrant community.

(Laughter)

MR. LLOYD: So, we have data on Asian-Americans, just a little, although, we haven't had much discussion really. I think Jorge talked a little bit about Asian-Americans. We've got data on Asian-Americans, but do we have immigrant Asian-American data, and the same thing for Latinos. Do we have good immigrant data?

Anyone?

MR. SCHEMENT: We don't have very good immigrant data for the reason that when we do our surveys, and it doesn't matter who's doing the surveys, the more different groups you're serving, the smaller the cells are in the survey of the number of people surveyed, and below a certain point, it's very difficult to draw any kinds of

conclusions because you have so few people in the survey.

So, in the future, that problem is going to get worse because there's going to be more diversity in the population, and we'll either follow an approach that says well, ignore all of that and just lump everybody together and we'll tell you what we think is happening to some uber group, or we'll have to have larger sample sizes. Larger sample sizes means more money, and, so, that will make surveys more expensive.

So, I don't anticipate that we're going to have better quality information about a lot of different groups unless we really work hard at it and unless we put the resources into doing it. Although, I will argue that the demand for better data is going to go up because the private sector is going to want that data.

MR. LLOYD: So, one of the questions we had pretty early on from our friend, Janelle Trigg, really is about data related to small businesses and broadband. Do we know and do we

aggregate data in a way to determine what it is that small businesses are both doing, who those small businesses are? What do we know about small business and broadband?

MS. SANDOVAL: I think it's extremely limited, and I think what these great questions are pointing out is that the researchers and the government has not necessarily been asking the right questions or using the proper methodologies, and, so, I think that a lot of businesses are growing with adoption, but that there are still gaps and that businesses could benefit more from some training, but also some of that will also depend upon what's the benefit they're going to get out of it in terms of their users?

And, so, if they have a lot of customers who are not online, the business may benefit from doing some business side stuff, but less so with the customer. So, I think that this is an area that definitely merits greater exploration, as well as when you look at, again, the application side. By that, I mean the policies of Internet

service providers that might potentially constrain use of applications as something that also affects small businesses, as well as people who are doing innovative things, in particular when you talk about bandwidth intensive uses, that can run up very quickly against network management policies.

MR. PRUNER: Yes, and one thing on the flipside of that, the Department of Commerce has lots of information, but you have to pay for it. You have to subscribe to it. So, I would encourage any information that is gathered -- and it may not be the Department of Commerce, but there is a Web Site that has lots of business-specific data. You go there, you have to pay a subscription fee. If you're a small business and you need one fact for that day, and you know it's there, you can see the study, but you've got to pay for it, a lot of small businesses aren't going to do that, whereas a large corporation can subscribe for the whole corporation.

MR. LLOYD: So, Maureen, did you want to

speak that?

MS. LEWIS: Yes. No, I was going to say the Department of Commerce does publish a lot of statistical data that is available on our Web Site --

MR. PRUNER: Right, there is a lot --

MS. LEWIS: -- for free (inaudible).

MR. PRUNER: Yes, I don't --

MS. LEWIS: But, yes, so, I just want to make sure that people do understand that, but, to your point, there is an agency at the Department of Commerce, the Minority Business Development Agency that I know is very interested in making certain that minority businesses in particular are adopting broadband, and they have done some studies that I think the last one was maybe about two or three years ago. So, that information is online at mbda.gov.

MR. TOBIAS: I think this is an area where public-private partnership would be extremely valuable to both sides. In other words, you have carriers and broadband manufacturers who

would be very interested in working on awareness, adoption, sustainability, retention research. So, you have this huge program there with more or less captive grantees who are predisposed to agree to participate in research studies that are not naturalistic like the ones we mostly get a chance to do, but are actually designed studies that say here's an intervention that we plan on accessibility or in small business adoption or whatever, and here's the control group and here's the test group, and you can get some great results using the program that you already have rolling out.

MR. LLOYD: "Captive grantees."

(Laughter)

MR. LLOYD: What a term. Cathy, I think this is for you. Eighty-three percent of Hispanics use broadband in California. What percentage of that is the total Hispanic market? Do you have any --

MR. SCHEMENT: What percent of California is the total Hispanic market?

MS. SANDOVAL: So, Professor Schement was saying the question is: What percentage of California is the total Hispanic market? I don't have that number right off of my fingertips, but California is one of the states that has no racial or ethnic majority. It is a plurality, and I believe that Hispanics make up around 35 to 40 percent of the population in the State of California. When you're talking about cities like Los Angeles, it's much higher, but we also have a very substantial Asian population, both longstanding residents who've lived there for decades and generations, and recent immigrants, and certainly, my study showed there were a number of Chinese and Vietnamese language radio stations in the Los Angeles area, as well as just a huge diversity in Los Angeles.

So, I could follow-up if somebody wants to e-mail me and get some more information on that, but I think that the point is from what Dr. Schement was saying, that the Latino population, in particular, is growing and growing nationally

also in places like Georgia, that there's huge growth, and, so, some of these issues that we're seeing in California are also replicated in other states.

MR. LLOYD: So, I've got a couple of questions that I'm going to combine here.

One is directed to Mr. Pruner. What potential exists for a Native American-oriented cable television network that would be provided through increased broadband availability?

And the other question has to do with, I think, radio programming in prompting adoption. And, so, these are really more questions about is there better content or is there a different sort of content that can be provided that would promote adoption?

MR. PRUNER: Yes, and that's one thing we've been pushing for with NTIA is to take the reserve funds and put them into sustainability projects for education. So, yes, we think that there are programs that can be done.

I went through, and of the 2,200

applications that were filed for the BIP and BTOP Programs, 60 of them approximately mentioned Indians, Native Americans, or tribes in any way. Of that, 24 tribes actually applied.

What we saw in several cases were people were throwing in Native Americans as kind of a SOP to get additional points. So, if you're planning on doing cable television programming with the Native community, you need to talk to the Native community before you do that.

In one situation in Washington State, the reservation is the size of Massachusetts. They want to put WiMax across the entire reservation. A local broadband supplier came to them and said well, we'd like to do that over here in the western portion where it's adjacent to us. Please withdraw your application. They didn't think that was good idea, and they said we're going to go ahead and file. When they looked it up online, it turned out the other company was filing to serve their land even though they don't necessarily have a right to go on it.

So, any time you're working with Native groups for Native programming, the thing to do is to contact them.

As I said, there are some commonalities, particularly in a region. Northwestern Indians generally share a culture. You've got the Algonquin language in the northwest. But to do programming for all Natives and all areas, while we all get along and we work with each other, we're all very prideful of our particular nation.

MR. LLOYD: Well, one of the challenges, and, Jorge, I know that you speak to this, and you may want to sort of jump in here, is that it seems to me that when we look to spurring adoption, that we need to have a much better understanding of how different populations are attracted to some particular content, or even to Cathy's point, a particular application. And I guess that's also Jim Tobias' point.

So, for the purposes of this panel, how do we get that information about how these different populations are attracted to particular

content, whether it's cable television programs, radio, or whatever?

MR. SCHEMENT: It's a good question, and as an example of the differences in characteristics of adoption, we did some household interviews in rural Pennsylvania a few years back with Latino families in rural Pennsylvania. All right, so, there weren't all that many of them that we interviewed. But we found that they were all highly connected in some way. Either they had Internet access or wireless or something and that the driving motive for all of them was what, talking to grandma in Mexico. That was the driving motive. In other words, communal family characteristics were driving these particular adoption characteristics.

Now, my guess is that we could identify a number of Latino families with some different characteristics elsewhere, and we might or might not see that turn up, but the by and large different groups tend to be driven by similar motives, but also by dissimilar motives. My

suggestion is that we need to do what we haven't really done very well, is just go out and talk to people. Go out and find these communities and sit down and talk to people in the community and look at the change that's taken place in communities.

I taught at Rutgers in the 1980s. There was no discernable Latino population, and I really missed getting pan dulce for breakfast. Now, New Brunswick is half Mexican. All right, so, in about a 20-year period, that part of central New Jersey will begin to change quite dramatically. Now I can get more bread than my age says I should eat.

(Laughter)

MR. SCHEMENT: Any time I want. So, these sorts of changes tend to take place under the radar screen even for some of us, and, yet, we need to be quite cognizant of them, and I think we just need to get out and talk to people.

MR. TOBIAS: I think that's absolutely right. It's exactly the same with respect to the disability communities that there are assumptions

about the needs, and then there are the realities, and some of the assumptions are right, but you won't know that for sure until you go out and talk with consumers, and consumers are very diverse, not only across disability characteristics, but their own preferences, just as any other consumer would be.

If we want to ask the question: Why do people make the move over to Internet or broadband, we have to understand how they're getting their information and communication needs met now. What are they using? And who are they communicating with now?

It's a two-party communication; it's not enough if I adopt Skype, I have to find somebody else I want to talk to who also has Skype and is Skype-accessible for both of us. That's the kind of qualitative, to begin with, very rich, narrative, and interview and focus group-driven data collection that, again, I think NTIA is really well-positioned to get started on.

MR. LLOYD: So, one of the challenges I

think that we had is -- well, let me just ask this question: Do we have good information about the Asian-American community in the U.S.? I know there's a sort of model, minority myth about Asian-Americans, and we don't have to worry about them, that they all have Internet and they're all online. But, it seems to me there's an extraordinary difference between recent immigrants and Asian-Americans and Asian-Americans who've been here for a long period. This is an extraordinarily diverse population with many different language challenges, as well.

MS. SANDOVAL: Yes, I think with Asian-Americans, it's a group that, again, where the Internet access reports seem to show an extremely high adoption rate XXX BEGIN TRACK MZ000220 XXX but, yet, for example in the State of California, as the California Emerging Technology Fund has been doing these interviews in six different languages, so, I know that they're interviewing people in English, Spanish, Chinese, Vietnamese, I believe Hmong, and Korean.

And, so, for example, the Hmong population has for a long time been low-income and also tends to be a very rural population, and, so, one would expect there to be different characteristics that are not well-documented.

Filipino is another one, and, so, I think that there is this assumption that all the different national groups where there's huge variations have the same access and the Census does have some data on income levels for these different ethnic groups or different national groups showing huge variations in income, and, on that basis alone, we would expect huge variations in Internet access.

So, I think it is an area that needs to be disaggregated more where you're putting together age, generational information, immigration information, linguistic information, rural, urban information to try to get more at the complexity and are there any particular groups where we really see lower levels of access?

MR. SCHEMENT: This appeal to

desegregation, I think, is quite important. I mean, if you think about it, it is a travesty to refer to the world's largest population as Asians. Right? I mean, if Filipinos and Chinese have more in common besides geography, it's not that much. I mean, they are as different as Europeans are from each other and as we are from them. And, at the same time, we share a lot of the same interests.

So, desegregations don't mean that we see everybody's differences alone. What it means is that we pay attention to nuances rather than lumping everybody together and try to achieve one, big outcome. And the reason we have done that for all these years is because the 20th Century was a century of mass marketing of all kinds. It was about aggregating audiences that made the great, national markets what they are. It's what Sears and Roebuck did in the 19th Century, aggregated audiences.

So, by aggregating audiences, we developed a sense of population should be

aggregated. So, in the 21st Century, what do we see business doing? Desegregating markets in order to penetrate markets more deeply.

So, it's a good time to desegregate the way we think about populations, as well.

MR. PRUNER: And I think the other thing is quantitative tends to drive out qualitative. We're very good at putting things in spreadsheets, and we're uncomfortable if we can't put it in a spreadsheet, but everybody here has talked about going out and talking to the people, and we're developing systems now to search qualitative data, to search anecdotal data, and be able to base some policy decisions on it. And I think that's a trend you see out there in businesses, and it's a good trend to move into government, too.

MR. LLOYD: So, I just got a note from one of our online participants that Native Public Media, which, in addition to working in radio, is a policy advocacy group, is in the final stage analysis on a demographic study of Internet use in Indian Country, and the study is comprehensive,

includes case studies, qualitative data. NPM has been working in concert with New American Foundation and the study brought strong demographics on use and will be released in mid to late November, in time for us to really sort of think about our broadband plan.

Maureen, did you have something you wanted to --

MR. SCHEMENT: Somebody had a question back there. This gentleman here raised his hand several times.

SPEAKER: (Off mike.)

MR. LLOYD: So, let me repeat the question. We just want to make sure -- this is one of the reasons that we're not sort of just (inaudible) hands, but this is a question about the concept of digital pessimism.

MR. SCHEMENT: Technology.

MR. LLOYD: And technology pessimism, and what it is that the government can do to address this.

MR. TOBIAS: Well, I'm guilty, I guess,

of raising it. I only meant it with respect to people with disabilities, generalizing from their unsatisfactory experiences with technology over time. But I think maybe it is a more general trend, but we know that there are ways around that, that to the extent that peer networks get established, and this is what new technologies are so great at.

We see logging and blogging and what have you in the disability communities are restoring what in some of those communities never existed. That is, when we speak of the disability communities, especially for people who become disabled later in life, they're not a community, they're not a native, knit community, and, so, we're using these new technologies to try to build the community, and that is very powerful both in communicating the technologies that don't work and the technologies that do work.

It's important though as we move into these kinds of more diffuse or abstract notions that if there's no regulatory oversight to begin

with, in the accessibility field, everything begins with the law of mandating accessibility. Without that, we really don't get a rich ecosystem that has any accessibility in it because it's too easy to ignore the issue.

So, I think we have to maintain focus on both of them, but, certainly, I'm not even an academic, but I get to say more research needs to be done. But we do have some very tantalizing notions of how to intervene efficiently to push back some of the technological pessimism.

MR. LLOYD: So, we have, I think, just a couple of minutes left here. And what's the question?

MS. PETERSON: I live in Durham, North Carolina, and we have a training program to train intercity youth in the IT industry (off mike). What is happening in that industry to make sure that young, African-American men are being trained to get employment because the other problem, not just that the training is not there in our community, the companies, once we're training our

young men and women in the African-American community, these companies are not even hiring them.

MR. LLOYD: Okay, so, one of --

MR. SCHEMENT: So, how can --

MR. LLOYD: Yes, so, we will have two other panels following this. One is going to be on one of the legal issues, sort of compelling the Federal Government to do one thing or another, and what are the limitations? And the final panel for this afternoon will be on best practices, and we hope to really sort of address that question about training and what's being done in particular the African-American communities in that final panel about best practices.

So, we're going to, I think, wrap up this panel. I have one question really just to sort of see if I can end things with, and that is: Do we have any data that suggests diversity of ownership makes any difference at all in terms of providing diverse service or providing service that might encourage adoption in particular

communities?

MR. SCHEMENT: Cathy Sandoval mentioned the study that she's doing which I am extremely interested in because I, 35 years ago, wrote a dissertation under Everett Rogers that looked at minority ownership of radio. At the time, there were only 70 radio stations that broadcast to minorities in the U.S., and only 14 of them were owned by minorities.

So, already, there's some change that's taken place. But this was an era of very few media outlets, and in the era of very few media outlets, what we found was that everybody was driven to make money and social issues went by the wayside, and it didn't matter what the ethnicity was.

We no long live in that era. We live in an era of a multiplicity of all kinds of outlets, and I'm hoping that what Catherine will tell us is that things have changed.

MS. SANDOVAL: So, my examination of things on the radio side -- I, again, have been

focusing on minority owners and their contributions, and one way to look at that is also looking at their Web Sites. So, one of the things I have been struck by is the discussions on the Web Sites.

So, for example, many of radio one stations have links to studies on Black America. There are also several African-American-owned stations who are doing a campaign. There's a particular person whose execution has actually been stayed by the Supreme Court and who are urging their listeners and viewers on the Internet to act on that.

The Navajo Nation talks about how it uses its stations, which is actually programmed in country, to also educate people about news of the day in the Four Corners Region and the Navajo word of the day to try to do language preservation. And, so, a lot of when you see the Hispanic owners, they talk about what they're doing in terms of trying to reflect the community and its particular needs.

So, I think that there is a lot of examples, but, again, when we talk about ownership, we have to identify what are we talking about?

With telecommunications and broadband infrastructure, a lot of that increasingly is owned by very large companies. When we talk about cable or DSL or wireless, when we look at Internet service providers, what we've seen is huge consolidation as opposed to, at the time of dial-up, there were over 6,000 independent Internet service providers in the United States. The number now is far lower, and, so, it would be interesting to see as we've had consolidation in the Internet service provider industry, what has happened in terms of service to actual local communities. I think that that is a concern.

And, so, where you do tend to some ownership diversity is with applications side, where people are developing specialized applications that may be more responsive to the needs of particular communities, as well of

interest to all communities. So, I think that this is important area to be explored.

MR. LLOYD: This is great. I want to thank all the panelists. The time has gone by very quickly, and a lot of information and data and probably more questions than anything else sort of coming out of this, but I think we've got some really good advice about the importance of both disaggregated data, very detailed data, but also qualitative studies in talking to people in communities and the range of things from disability to language to applications to ownership to take into account as we look forward.

We're going to take a break. We're going to come back with another panel in about 15 minutes looking on legal issues. Again, thank you very much.

(Applause)

(Recess)

MR. LLOYD: So, we're going to get started here. We have one panelist who I know who is here that we're waiting for, and I'm sure

she'll come back shortly. We are privileged to be joined by Commissioner Michael Copps, who has been fighting the good fight for diversity here at the Federal Communications Commission for how many years?

MR. COPPS: Eight years.

MR. LLOYD: At least a couple administrations. Eight years. And, again, very privileged to have you join us, and I know that you didn't want us to make a big deal, but if you could just sort of give us a couple of words. You made a point of reestablishing the Diversity Advisory Committee because I know this is an extraordinarily important set of issues for you, and, so, if you could give us an invocation, Reverend, we'd love if you could sort of start us off.

MR. COPPS: All right. Well, thank you. I do not have a speech. I came down primarily to listen for the next 30 minutes or an hour or so. That's what I want to do. I am so privileged that you are here at the FCC, and we are thrilled to

have Mark Lloyd helping us work our way through all of this, and I'm so grateful for everybody on this panel for being here and the previous panel and the next panel, too, today.

This is really the hour. This is kind of where the rubber really hits the road now. We've got in this country an opportunity to do some good things, whether it's building broadband or creating equal opportunity, and not just through broadband, but through a number of other policies, whether it's building media democracy, which is something I've been interested in for years and years. There's a window of opportunity that's open in this country now. How long it will stay open and how wide it is open, nobody knows. So, the premium is on action. So, I'm glad to see this commission mobilize the way it has been mobilized under the chairman, Chairman Janikowski, to really get the data that we need not only to inform our actions, but to sustain our actions going forward and get that policy formulated for broadband between now and next February.

There are other areas where I think we already have a lot of data. We know a lot of what's lacking in media diversity and in other things where I think we need to act now. As I say, we don't know how long that window will stay open, and a year from now, everybody might be circling the wagon saying whatever happened to that wonderful opportunity that we had to build broadband, create equal opportunity, create media democracy, and all of the rest.

To me, access to modern telecommunications is tantamount to a civil right, is a civil right. You got to have it. If you have no access to that, whether you're in the inner city, the rural countryside, a tribal land, a member of the disabilities communities, you are hobbled. You are really hobbled in being a fully participating member in American society going forward.

This is the infrastructure challenge of our era, getting this stuff out in the 21st Century is certainly equally important and maybe

more important than it was in the early days to build roads and bridges and harbors and canals and railroads and highways and rural electricity and then basic plain old telephone service. This is the roads and the highways and the bridges and canals and everything else in the 21st Century and getting out to every American. That's going to be the trick here. I have no doubt we're going to succeed in getting it out even more than we have. We get out more and better services to a lot of the American people, but it's that final hard-to-reach group where so many of our diversity communities and others live that we really are going to have to be creative and innovative. So, I'm just thankful that all of you are here and working hard. We're all working hard on it.

I'm going to be going with Commissioner Clyburn down to South Carolina next week. We're going to do some outreach down there and not only talk about broadband deployment, but to try to get the message on broadband adoption out so that people can understand because not everybody does.

Tremendously impact who they are by this, and what kind of windows of opportunity it opens for every individual to be a productive member of society, employed member of society, and a fulfilled member of society, too.

So, this is a priority of mine, this diversity realizing the next chapter in civil rights through this technology really and expanding opportunities.

So, I'm grateful, and, with that, I will hush up and listen to you folks who know a lot more about it.

Thank you.

MR. LLOYD: Thank you. Thank you, sir. We really appreciate you coming in.

Just a couple of housekeeping notes. Our Room Coordinator, Calvin Osborne, has asked me to remind folks that we do have index cards in the back, and, Calvin, if you could raise your hand again so folks know if you need to ask questions, please get those index cards and Calvin will be sure to get those to me. We want to make sure

that the questions get on mike, and also we can make sure that we're sort of staying on topic here.

The other housekeeping note was I wanted to make sure that folks who were interested particularly in the last discussion about data, that the organization, I think it's the Greenlining Institute has got really very good set of data about different uses of the Internet by different ethnic populations, and if you go to the Greenlining Institute Web Site, you'll be able to get that data. Again, very interesting set of statistics on broadband use.

The last panel, we talked about data, what do we know, how do we get better data, what's the better data that we have to get? As Commissioner Copps, I think, properly said, this is one of the tough panels. We could spend a week on this question of what are the legal obligations of the Federal Government in trying to address the issues of civil rights and diversity in the United States. With regard to broadband access and

adoption, we've only got a few minutes really. And, so, I want to get right to that.

I also want to note that we will continue a conversation. This is a listening session. This is not the end of a conversation. This is the beginning of a conversation, and we encourage questions both from the audience and online.

And I think, with that, let me introduce my friend, Dr. Mary Frances Berry. Dr. Berry is really one of the prominent legal scholars of our time, both an historian and someone who particularly is chair and member of the Civil Rights Commission for many years, has worked very closely on the question of what it is that the Federal Government must do or is limited to do regarding civil rights issues. And both in collecting data and then driving the folks, whether they were the president or whomever to actually do something about that data.

And let me also say that we have very full biographies of everyone both online and I

think there may be some biographies passed off. So, I'm not doing any of the panelists justice here with these brief introductions, but we do want to get to the discussions as quickly as possible.

Dr. Berry, with that.

DR. BERRY: Well, Mark, thank you very much for having me, and I want to say to Commissioner Copp how much I have appreciated his leadership and commitment, which has been sustained over the years on this subject as well as others that are important to our country. Also to say that since he said what he said, I don't have to say that.

(Laughter)

DR. BERRY: As a matter of fact, I don't even have to read the line where I talk about enhanced broadband access in equity is one of the major civil rights challenges of our time. So, I don't have to read that.

And, also, I will say that the first time I encountered this subject of communications

in any sustained way was when I was first appointed to the Commission and it had just done a study called "Window Dressing on the Set," which was about the FCC, and in those days, the Commission had to explain why communications was so important. And, so, they spent a quarter of the report explaining why it was important to people to have access and to be recognized and acknowledged and all the rest of it.

Well, we don't have to do that today because we understand that, and we understand in terms of the mission of the FCC, which is clearly stated and what this broadband plan is about, how important it is to include all the people who have been left out.

And it's not just as I heard someone say on the last panel because they use the Internet or they use Skype of something to get in touch with momma wherever momma or grandmamma lives. The point is to do more than that. What you want people to do is to utilize it for all of the things that can be done so that they are

acknowledged that they have resources and that they can be engaged, which is even more important because if they are not connected, they can't be engaged in all sorts of ways that are informational and are educational and relate to whether they, indeed, are going to be redundant in a society where it is technologically advanced as we move whether they are going to be able to become productive members of society. So, it's in the national interest, as well as in the individual interest, that we do more than just playing around with this thing.

Now, if we all agree with this, and I'm sure we do, then all we have to talk about here is what are the legal barriers? I want to talk about the legal barriers and how you overcome them to try and target on the groups that have been left out, and to make sure that people are included.

The primary barrier, of course, is that Metro Broadcasting 1990 decision is gone. We don't have it anymore. So, therefore, we have strict scrutiny, which anything that targets

people and race is the bugbear in the room because, in fact, when you talk about disability rights and gender and all the rest, you have a lower standard that you have to worry about as you develop these plans.

So, race is really the primary problem here. And, so, we have strict scrutiny, and since Adarand, what you got to do is make sure that you prove that there is a compelling governmental interest and make sure that you show that you narrowly tailored whatever you do in this plan, and that you tried every alternative possible and that whatever you're doing is of short duration.

And, in addition, the FCC is hamstrung by the Lutheran Broadcasting Case, Lutheran Church Case of 1988, which you have, which throughout your employment regulations, which I guess FCC recognized it was a bad case based on how that evolved over the years.

Sometimes, what lawyers have to do is understand when to avoid litigation. You don't litigate something that's going to set you up as a

target, and I have the hardest time in the world explaining that to the lawyers I deal with in various non-profits who like to go to court. They're like surgeons who like to do surgery.

(Laughter)

DR. BERRY: But then we still have now the Michigan Case, and we have O'Connor's opinion there, and that can be used, and that was not affected by the Seattle Case because there's nothing in the Seattle Case that affects that or the New Haven Firefighters Case. And the nice part when you're dealing with this subject is that we're not talking a zero sum game as we do with schools. Schools, somebody gets in and then somebody doesn't get in, and then they get mad and they sue. We're not talking about jobs where somebody gets promoted and somebody doesn't. What we're talking about is figuring out where everybody can have access.

So, what is it you do since I have two minutes and eight seconds? What is it that you do that I think will pass muster, given these

standards, and I think it's impossible to do it.

The earlier panel on data, data, of course, is very important, but the first thing you have to do is show in your plan why the country needs technologically adept folks in the national interest, and I mean in detail, I don't mean just saying. You can't just say things, you have to show, not tell. You have to show, not tell in order to get over the barriers that the courts have set up, and the courts are going to change, but not this minute.

Overwhelming evidence of lack of utilization has to be there. Overwhelming evidence. I mean, you might think its' too much. Overwhelming evidence, lack of access, and overwhelming evidence of people not using it. You have to show that with data, and you can get data not just from NTIA and the work that they're doing, but the agency can get data directly from companies. That is the service providers. We did that, and as a commission government agency is going to do that. You get the data of who served

neighborhood by neighborhood who these people are and use the data and set it up and show it in your plan, and also show that you have accepted and rejected various approaches to trying to meet your overall goal.

You've got to show that in the plan. We thought we'd tried this, but that doesn't work because of that, and then we tried that. This is required under the standards that are there. Then you've got to show finally that you are going to monitor whatever you do and that you're aware that technological change is a moving target and that you have to keep moving on it and you have to show that, not tell that. And then you have to analyze once you look at the plan that you develop, who is likely to bring a legal attack and why would they bring it, and what are they likely to argue, and how do we repel them before we wait until they do it? And if you do all of that, I believe you can develop a plan that will ensure success and meeting the needs of our people and exercising the FCC's responsibility.

Thank you. I made it.

(Laughter)

MR. LLOYD: We're going to keep the other panelists to that. Thank you very much for that, Mary. It's really very helpful.

Geoff Blackwell, you've been working on these issues for quite awhile, and I know you're going to say this, the relationship between the Federal Government and Native American Tribes is a little different, it puts, I think, a different twist on these set of issues.

What does the Federal Government need to do regarding Native Americans?

MR. BLACKWELL: Thank you, Mark. Thank you very much for the invitation to be here today in one of my favorite rooms in this building.

And, to Commissioner Copps, once again, I will tell you on behalf of Indian Country, if you keep this up, we're going to have to build a monument to you in Indian Country.

(Laughter)

MR. BLACKWELL: But I'll begin by saying

(speaking in Chickasha). Greetings on behalf of Chickasaw Nation Industries, the National Congress of American Indians, Native Public Media, which is a project of the National Federation of Community Broadcasters. I'm pleased to be able to join you and share this time and share some views.

Answering Mark's question, in order for the new National Broadband Plan to operate to success in Indian Country, the legal barrier that has to be overcome is really one of understanding and action. It's going to require a new, unprecedented level of government-to-government coordination between the FCC and the other agencies and American Indian and Alaska Native federally-recognized tribal entities.

And the reason for this is pretty simple. For the three sovereigns that are recognized in the United States Constitution, one of them was entirely left out of the Communications Act of 1934 and the Telecom Act of 1996, and it has caused the myriad type of challenges and conditions to which the

commissioner and Professor Berry alluded to, and I'm not going to spend my time talking about all of the incredible needs for broadband in Indian Country, just suffice it to say we bury the needle in the red; no pun intended.

And the Commission has very good tools to be able to do this, a very good framework that has developed over the last 10 years that it can draw upon. There is very creative tribal policy statement that envisions new types of removals to barriers to entry. The Commission has created very special, enhanced programs under the Universal Service Fund, particularly the Enhanced Tribal Lands Lifeline and Link-Up Program that created significant rises in the telephone penetration rate in Indian Country. Unfortunately, that penetration rate is still just below 70 percent, so, it's worth it to remember that there are many places in tribal America where we face an analog divide as well as a digital divide.

There are other creative programs, such

as the Tribal Lands Bidding Credit. While having not been as successful as we'd hoped over the last 10 years, it does create an interesting regulatory question and opportunity for industry to work directly with tribes. And that must be kept in the front of our regulators' minds that, in Indian Country, we're very focused on what will be good both for our communities and for industries. Our primary concern, of course, is growing stable, reliable economies, and economies based on knowledge.

As far as constitutional concerns, Mark did not warn me that I would be seeing on a panel with so many professors. I felt as though maybe I should stand to answer or prepare for an examination.

(Laughter)

MR. BLACKWELL: But he did give me a good, leading question: The Adaran strict scrutiny does not apply to tribes, federally-recognized tribal entities, their citizens, their institutions, and

instrumentalities because tribes are classified as political, they're politically classified, not racially classified.

Now, some tribal leaders would say that only means that we suffer under a separate part of the Constitution. But, therefore, a rational basis review is what applies to Federal Government action when taken with regard to federally-recognized Indian tribes. And you have examples of this throughout government. The Bureau of Indian Affairs, the Indian Health Service, the Administration for Native Americans. Indeed, within this building, you have the programs that I've previously mentioned, as well as the work of the Consumer and Governmental Affairs Bureau and the Office of Intergovernmental Affairs, and the senior attorney and tribal liaison.

It's worth it to say there are those who doubt the veracity of this, much as Professor Berry alluded, we must look to those who would challenge this. And it's true, every day, tribal

jurisdiction, federal jurisdiction, state jurisdiction is challenged in court. What is true is that the bedrock cases for this stand for the principle of tribes as governments, and we certainly believe at the National Congress of American Indians and at Chickasaw Nation Industries that that is a concept that shall not be shaken in the future again.

By way of background, to give you some resources, these issues are laid out in the recommendations that the FCC's Diversity Advisory Committee recently adopted and promulgated to the FCC. It's my honor to serve on the Constitutional Subcommittee that Mr. Honig chairs, and he very astutely worked with the subcommittee to also address almost a subsidiary issue that may implicate, that should implicate Adarand and the review that Professor Berry mentioned.

There are those within the larger minority community who, indeed, are racially descended from tribes or Native Americans. It's an unfortunate fact of history that it's not

always been fashionable to be American Indian, and, in some ways over time, they have lost their connection to their tribes and do not have the opportunity to become citizens of federally-recognized tribes.

Nevertheless, they suffer under what I think this room regards as traditional civil rights and social justice issues, and would, therefore, the Adarand (inaudible) review would apply, and the Diversity Advisory Committee made a recommendation regarding that when it said, nevertheless, if there are Native Americans who pursue full file review before the commission, that the commission allow that opportunity.

So, that being said, and counting down on my time, I want to give you the impression that it is very, very important for the Federal Government to work directly with our elected tribal leaders. They are the ones that know the ground the best. They are the ones that have been elected by their peoples to represent them. It is our job as institutions and experts and to

(inaudible) to train them to be able to talk to you to inform them just as much as we inform the Federal Government.

And I look forward to questions, and I will throw it back to you, Mark, in terms of potential questions involving -- for Indian Country, we like to say, and it's going to challenge the FCC, one size fits none.

So, with that, thank you for my time.

MR. LLOYD: Wow. Thank you, Geoff. I love saying Dr. Einstein. And that's not really the reason that you're on this panel. You have, Dr. Mara Einstein, one of the other disadvantages of being one of the few folks, even though you are a professor, you're really not a lawyer.

DR. EINSTEIN: No. And I don't play one on TV either.

MR. LLOYD: And you don't play -- but you do have significant experience in the industry.

DR. EINSTEIN: Okay.

MR. LLOYD: And you've also written, I

think, some really important work questioning the FCC's definition and use of the term "diversity," and are now doing some really interesting work on religious institutions in the United States. And, so, I really wanted to ask you to sort of speak to some of those issues here. So, with that.

DR. EINSTEIN: My pleasure. Thank you. I want to thank Mark for asking me to be here and also for Commissioner Copps for coming.

Since I was given seven minutes, I'm going to read my notes because, as a professor, I tend to go into wild fancies and discussion, so, I want to stick to topic.

Based on what Mark sent me, I want to address two questions as it relates to content diversity. Should the FCC allow market forces to be the sole determinant of broadband access and adoption? And should the FCC fund specific applications such as education, health care, or should particular groups be taken into account when making policy decisions?

As some of you may know, in 2003, I

conducted quantitative research on the impact of media consultation on content diversity. My finding suggested that consolidation did not significantly affect diversity in entertainment programming. This surprising finding forced me to ask a new research question: If consolidation isn't restricting diversity, then what was?

The answer lies in the underlying economic structure of the industry, specifically media outlets old and new are reliant on advertising as their primary source of revenue.

Advertising and marketing raise two, important issues. First, the price of advertising is dependent on the size of the audience, so, content is driven by what appeals to the largest number of people. In line with an advertising-based revenue structure and true to basic economic theory, programmers create similar content because it's the most effective means of creating the largest possible audience.

Second, in today's cluttered and fragmented media environment, it's difficult to

create awareness of media content. Thus, its companies with the capital to invest in marketing or the ones with the most media outlets through which to promote themselves.

So, for example, USA promotes NBC, which promotes Hulu, which may soon be promoting Comcast, right? That are going to be able to get the audiences' attention. Given this, large media companies are best positioned to be successful in this marketplace. Even in the digital space, the existing advertiser-based economic model predominates from Google to blip.tv, to millions of personal and corporate blogs, advertising is the fuel that runs the media engine. When it comes to revenue generation, new media looks exactly like old media, and this economic model is anathema to content diversity.

Let me give you a recent example of how dependence on advertising affects consent. After the success of YouTube, numerous video Web Sites popped up that appealed to specific demographic or interest groups, including TeacherTube to -- and

I'm sure you're not surprised, PornTube and SexTube.

The most successful of these, however, was GodTube, started by evangelical Christians, the site was made up of clips from local churches, Christian music videos, home videos of kids quoting from the Bible, and so on.

While the content was primarily Christian, the site did include videos for multiple religious groups. There were reports about censorship on the site, but we'll leave that aside for now.

As the site developed, the founders added a social media element to the site, ala Facebook, which provided social networking tools to congregations around the country. This is important because many churches might not feel comfortable on a Facebook or a MySpace, but within the confines of GodTube, they would be surrounded by family-friendly content.

All of this changed last year, however, when a venture capital firm invested $50 million

in GodTube. Almost immediately, the site was completely revamped. Gone are the churches, gone is the commercial-free environment, gone is the multiplicity of religious viewpoints. Instead, personal videos have been replaced by a significant number of commercially-produced videos.

Advertising pervades the site through pre-roll or by appearing in the bottom-third of videos, and instead of hundreds of small churches, the social networking area contains exactly 22 sites, several of whom are connected to larger media entities. This is a perfect example of why the market can't or rather won't sell the problem of the digital divide as it relates to content.

Since the market is not the answer, how should the FCC promote access and diversity?

Before I answer that question, I need to interject that today's problems are not the ones we faced six years ago. In the television marketplace, for instance, the issue was one of access. What we learned back then was that

structural regulation is ineffective in creating content diversity. If you want content diversity, you need to regulate content. I know that's controversial (inaudible) lawyers.

The issue, however, is less one of access than awareness. It's relatively inexpensive to create a Web Site. It is expensive, however, to let people know it exists. I would add it is also expensive to have broadband Internet access and to maintain a staff that can provide continually-updated content.

The government can fund and promote categories of content without specifying what exactly the content should be. This has been done in the past, and I'm thinking here of the Children's Television Act, and it would not infringe on the Constitution.

Priority should be given to community news sites, unbiased health care information, job assistance, education, and perhaps even a government-sponsored GodTube, where all faiths are welcome.

While this would not specifically name minor or ethnic groups as recipients of funding, it would not preclude them either.

For example, sites addressing specific health care issues, such as obesity, which is highly correlated with certain minorities and economic status should be funded. I would also stress that they would not be government-run sites. All right. The government is not taking over the Web Sites, too, and, with all due respect, the FCC and the HHS sites are anything but user-friendly. And you've been there, obviously.

Finally, while I agree with using anchor institutions for content creation and information dissemination, because of my more recent research in media and religion, I do not recommend funding through religious institutions.

First, it is difficult for evangelical organizations to separate proselytizing from their secularly-funded programs. This is particularly notable in 34 percent, fully one-third of the

population identifies as born again, and their churches reflect this belief system.

Second, mega church congregations, those catering to 2,000 congregants or more, are one of the fastest-growing segments of churchgoers, and these institutions are already extremely Internet-savvy. They're also usually upper middle class and have a tremendous amount of funding internally.

I would add that an increasing number of synagogues have also effectively used the Internet for everything from presenting live services to assisting with distance learning for bar and bat mitzvah.

Third, while the prevailing gallop research has claimed traditionally and for a very long time that 40 percent of Americans attend church on a weekly basis, new research puts that figure at a more realistic 20 percent, suggesting that people might be better reached through other institutions.

In sum, the FCC, in revising its

broadband policy, it must also take into consideration what is being conveyed through the Internet and who and who is not being served by that content.

Thank you.

MR. LLOYD: Wow. Lots of, I hope, provocative things for the panel to consider in looking forward to the conversation moving forward.

Professor Hammond, I've been working with Al for a number of years as a colleague, and I think one of the few panelists today who actually has a PowerPoint slide. So, one more professor and a lawyer.

So, Al Hammond, please.

MR. HAMMOND: Good morning. Thank you, Mark, for inviting me to be here today and thank you, Commissioner for all your work. I've cited it many times.

The FCC has a number of enumerated tasks which Mark enumerated in his letter to us. It's to provide a roadmap towards achieving this goal

of ensuring all Americans reap the benefits of broadband, and I won't go through all these things that it's supposed to identify, but the question I was asked to address is: What does the law compel or limit regarding government action to close gaps in broadband access and adoption? And Professor Berry has spoken on the diversity issue, so, I will limit my remarks to what is the FCC supposed to do?

So, I'll talk briefly about mandates, very, very briefly about some obstacles, and then possible restraints. As I said before, leaving out the constitutional piece and focusing more on the regulatory piece.

So, the mandate. Well, there are several places you can go. First of all, to the preamble, to make available to all people of the United States without discrimination on the basis of race, color, religion, national origin, or sex, a rapid, efficient, nationwide communication service. And that was the Communications Act of 1934, as amended by the Telecom Act of 1996.

Going on, the FCC is also supposed to encourage the deployment on a reasonable and timely basis of advanced Telecom, and that's 706 in the Telecom Act of 1996.

Including in the 706 mandate is that the FCC should initiate periodic notices of inquiry concerning the availability of broadband, determine whether deployment is reasonable and timely, and, if not, take immediate action to accelerate deployment by removing barriers to investment and promoting competition.

So, under the ARRA, the FCC is also supposed to develop a national broadband plan, again, to ensure that all people of the United States have access to broadband. And the FCC also has a requirement to conduct a triennial review and to report to Congress on efforts to identify and eliminate regulatory barriers to market entry in the provision, and the ownership of telecommunication services and information services by entrepreneurs and small businesses, and to identify proposals to eliminate statutory

barriers, as well.

So, if you put that all together, the Commission is required to facilitate inclusive, non-discriminatory, affordable access to broadband in a reasonable and timely manner, and if we're not reasonable and timely, take immediate action to accelerate deployment by removing barriers to investment and promoting competition.

I don't think we've ever put all that together before. I certainly haven't seen it anywhere.

So, that also includes the identification and elimination of regulatory and statutory barriers to market entry by entrepreneurs and small businesses.

So, it seems to me that there's a mandate that's quite expansive to make sure that all Americans have access and to do so, in part, by encouraging small businesses, minority businesses to enter the market to enhance and create the competition which may not be in existence in certainly communities which are now

presently un-served and underserved.

So, there are a number of obstacles to access, and the panel previous to ours has talked about that in some detail, and we can talk about substantial disparities in Internet use in terms of adults with household incomes of less than $40,000 compared to those with more than $40,000 on average. Forty-nine percent versus ninety-two. The disparities between African-Americans and the national average, the low-income minorities, as well, versus non-minorities without regard to income.

And we can also talk about the absence of relevant content, which in the Pew Forum Study most recently, 50 percent of individuals without broadband access reported that it wasn't anything relevant to them, and that was why they were, in part, reluctant to engage in it, and, yet, you have several organizations, the National Urban League, the National Council of La Raza, and One Economy, pointing out that there is relevant content that needs to be provided and that needs

to be created specifically that is engaging in a formative, and that facilitates people increasing their access to the Net.

That would be public purpose media, I guess would be the way to call it, and that tailors content to the cultural, financial, geographic, and professional needs of individual communities that these media companies would seek to serve.

Now, in the past, that type of service has been provided by community-based organizations, wireless ISPs, small ones, and (inaudible) and also government-initiated broadband networks, which have targeted communities of color and communities of low income as likely markets for the provision of services, and they have demonstrated that there are responsive strategies that may be employed in those areas.

But there are possible constraints, and I think one of the things that both the research that I've done in terms of the impact of multiple

ownership rules, FCC's multiple ownership rules on minority broadcasting, and I'm sure that Cathy has been involved in, as well, is that the Commission tends to silo its decision-making, and, so, while, on the one hand, it says we have to encourage minority ownership, we have to encourage gender-based ownership, even with the constitutional limits, they also say well, we're going to increase the multiple ownership limits, and they don't compare the impact or anticipate the impact of the change and the limits on the small businesses that are also operating on the space.

Some of the things that we need to be considering when we talk about the regulatory environment having an impact on these policies would be the following: Universal service, because you're going to need funding to pass the ARRA. If you have $7 billion provided by the ARRA, but you look at the $28 billion in demand that came in with the applications, then you compare that with the $30 billion that I think

AT&T is spending on its network. There's just not enough money there.

So, where's that money going to come from in the future? It's going to come from the Universal Service Fund, more than likely. That's going to be an area.

You can see from the list, there are a number of other things, Rural ETC Policies, whether or not we continue to encourage government-led broadband initiatives, Net neutrality, network interconnection, reciprocal compensation, and, also, whether or not we reinstitute some sort of a resale and cost of network elements policy that would allow these small companies to actually compete.

I'm running out of time here. As I said before, Mary talked about this. I'll leave the constitutional environment and diversity out. But I just want to encourage the FCC when it thinks about diversity, when it thinks about encouraging competition from these small companies, that it understands that there's a much larger environment

that we're working with, and you can't implement that policy without taking into account what you're doing in the rest of the regulatory space.

Thank you.

MR. LLOYD: Great. Thank you, Allen. It's really very useful.

Thomas Henderson, although you have taught in the past, you are a working lawyer, and you represent real clients in courts and get paid to do that. I mean, you're a real lawyer.

(Laughter)

MR. LLOYD: Not like some of us aren't. So, we're really looking to your take on this about what we can do and what some of the limitations are. Not that you're not a real lawyer, Mary.

SPEAKER: (Off mike)

(Laugher)

MR. HENDERSON: Well, I will say that I am just a civil rights lawyer when you get down to it. And I say that in particular because I don't have anywhere near the background all of you do in

this subject matter and the terminology and so forth. I struggled to learn various areas that I deal in, and I have a little familiarity with the FCC, but I don't pretend to really have a good grasp on the content and the possibilities of the discussion about broadband and so forth.

I want to, again, thank you for the opportunity to speak today, and I want to thank the Commissioner for his comments and say that, from what I have begun to understand about the enterprise that the FCC is engaged in, I agree, it is a time of historic opportunities. And it is the moment to act, and acting now can, I think, have a vast affect on society and reaching into the future.

It's terrific that you're having this session today. I would also suggest that it is imperative, and I know you know this, but it's imperative to follow-up on this and do the details.

Doing work designed to promote or facilitate the evolvement of everyone in

government resources and opportunities is not easy; it's hard work. The Supreme Court has made sure that it is hard work, but it's work that can be done, and I hope to share at least a few ideas today on the kinds of things that can be done, but it has to be done and done well, and, to be candid, I think it's very important that the FCC do it particularly well because, in the past, in my view at least, the FCC has not always done it well, and that its paid the price in the courts and in some perceptions by the courts.

So, I think it's particularly important that the FCC lay a firm foundation and do the work necessary to design a program that effectively is going to reach and provide opportunities and access for everyone.

You understand, of course, this is an impossible task, not even seven minutes, but a couple of days, it's a bit of an impossible task to try to talk about what is permissible and what isn't and whether the kinds of things you need to look at. I hope only to touch on a few points, I

think, of interest that show the opportunities that I think the FCC has in developing policies and the basis on which to move forward.

The scope, I'm not even sure what the scope is, but it seems to me that the scope of what we're talking about today is, on the one hand, making services available to people, making information available to people, giving access to people, and to the extent the FCC controls or regulates that, there are lots of opportunities to make sure that things are done in a way that reach everyone.

But, as well, it seems to me that we're also talking about making sure that there are opportunities available in the industry, in the work of the FCC, and in the industry that's working in the whole broadband area, including, for example, employment opportunities there, contracting and subcontracting opportunities there, and ownership, as I think Allen was alluding to. The ownership opportunities, the opportunity to participate in this marketplace.

So, understanding that enormously broad scope, let me say a couple of things.

One, it is clear even after the decisions, the most recent and interpreted as hostile decisions about what I'm going to refer to as affirmative action, the Hartford Case, even there, it's acknowledged that race-neutral efforts or -- and I'm going to use race because, as Mary said, race is the hardest one, the strictest standards, so, if you can take care of race, you can take care of anything else.

But even after Hartford, it's clear that you can act with an awareness of race to plan things, to accommodate to take into account, to allow the greatest participation of race so long as you're not classifying people or treating people differently.

So, you can use geography, you can use demographics, you can use specialized programs, you can use outreach and so forth in ways that are designed for inclusion without running afoul the Constitution.

And although race in the world I work in, race-neutral remedies are sometimes disparaged and seen as not effective, there are lots of reasons to consider them thoroughly.

One, you can get a lot done through race-neutral means that you don't have to employ race-conscious ones. Secondly, they can be really useful in identifying where the real barriers are. Where are the real problems? Where are the real barriers to access? Because if you do race-neutral things and you're still not getting there, you're going to be able to identify the problems that really need work to be solved. And the third thing is employing them and using them provides a very good basis for race-conscious actions if you need to take them.

With regard to employment, there are already means available. The Executive Order 11246 requires and federal contractor not to discriminate and that has given a fulsome interpretation by the OFCCP that requires analyses of the workforce to see whether the workforce of

any contractor matches the available labor market, and, if not, provides for goals and timetables to get there.

So, those kinds of measures are available already and important.

With respect to contracting -- well, and let me say I think there's undiscovered possibilities in considering Title VI of the Civil Rights Act, which provides that recipients of federal financial assistance are prohibited from discriminating and the Supreme Court has held that that can include an effects test, that is having a discriminatory effect. Government agencies can require by regulation that people not take actions that have discriminatory effect. It seems to me that provides lots of possibilities for the Commission in terms of pursuing policies that would include everyone and not exclude folks.

I don't have time to go into the more difficult and rigorous requirements. If you want to take race-conscious action, I would, I think, simply suggest that one place to look is the

Department of Transportation. The Department of Transportation, after Adarand came, Adarand was a Department of Transportation case. After that case came down during the Clinton Administration, the Department of Transportation undertook a thorough review of that program, redesigned regulations. It's the Disadvantaged Business Enterprise Program. The new regulations were adopted, and that program so far has been upheld in the federal courts as being constitutional. So, it's one place to go and take a look.

MR. LLOYD: Very, very helpful. Thank you, Thomas. David Honig chairs the Constitutional Committee of the Diversity Advisory Committee. That's sort of the short name for the Diversity Advisory Committee, and David was one of the forces behind creating these panels, and I asked David to sort of bat cleanup here and sort of pay close attention to what folks were saying and see if we could sort of cover some more ground and figure out where the holes were.

So, with that, David Honig, executive

director of the Minority Media telecommunications Council.

MR. HONIG: There were no holes.

(Laughter)

MR. LLOYD: I don't believe that.

MR. HONIG: What we've heard is some remarkably brilliant and astute observations about the nexus between traditional civil rights and access to modern communications, as Commission Copps expressed it, and some elements of that that Professor Berry and Professor Hammond expressed.

The subset of all of that that the FCC's Advisory Committee and Diversity addressed and voted on unanimously in two recommendations is what I wanted to speak to today, which is this question that Tom Henderson teed up about the opportunity of entrepreneurs to have an ownership stake where they can monetize their creative and entrepreneurial and managerial talents fully, where everyone can do that. And the Diversity Committee looked at really two questions.

First, in light of Adarand, which has

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been discussed earlier, what should the Commission do to develop within the constraint of strict scrutiny sound policy, which may or may not wind up being race-conscious, to address in this case disparities in ownership?

What the committee recommended requires a little bit of history. This question was first teed up in 1995, after Adarand. By then, General Counsel Bill Kennard subsequently the chairman. There were six studies that the Commission had undertaken which were released in December of 2000, which covered the waterfront studies normally would in this area trying to develop history and the economics and what were the disparities in order to justify potentially race-conscious initiatives.

Then, after that, for the last several years, not much happened. The studies did not get translated into policy. There was an updating of the record in 2004 and again in 2007, but, meantime, these studies were quite valid, have sat on the shelf. The data underlying them is often

data from the late 90s, and leaving aside whether or not a court would regard data that's stale as not useful. Certainly, the industries have evolved and a whole new industry has been created largely since then. So, it would just be good policy to develop new studies.

The Committee recommended that seven such studies be done, updating first six of them to update the previous ones, and one new one on broadband services and access to capital and market entry barriers in broadband.

The Committee also took up the question of what would be a less-dilute definition of eligible entities which now is the definition of small businesses. In terms of impact on minorities and women that would still be race and gender-neutral. And whether that's used instead of or until these Adarand studies conclude that it might be necessary, and maybe it isn't, but it might be necessary to use race-conscious means.

What would that look like? Well, it's really a paradigm that was borrowed from state

university systems where the voters in the states had voted not to permit the use of state funds for race-conscious remedies. And this is a paradigm locally known as Full File Review or FFR.

In the context when we translated that paradigm into the FCC's world, it is basically that in designing a definition for how is an eligible entity either in the waiver context or in the comparative, non-zero sum context. An entity might be considered eligible for relief if it has overcome a disadvantage. The overcoming of which is predictive of entrepreneurial success. Certainly, there is a long history, particularly with broadcast comparative hearings and auctions of the Commission having comparative processes which lead to the selection of a winner who then does not perform, leaving the losers to say well, we put in all this work, why didn't they pick us? And then the Commission has spent all the time, meantime, the public isn't getting service.

So, the idea would be to look at what is predictive of entrepreneurial success? The social

disadvantages that could be overcome could be, among many others, disadvantages that derive from having experienced racial discrimination or gender discrimination or the various disabilities that, unfortunately, attend veterans' status or living in certain geographic areas or certain kinds of disabilities and others. And this is two degrees of separation removed from race. There would be no advantage because of race, there would not even be an advantage because of having experienced racial discrimination, rather the advantage comes from the success due to the person's (inaudible) in overcoming those or any other disadvantages.

So, that is pretty clear race-neutral, yet, we believe that it would be properly focused on these industries and that it would survive any review that looks at whether it's race-conscious or race-neutral.

Now, several recommendations were made by the Diversity Committee as how this would be implemented. In particular, the committee recommended that an FFR, Full File Review Program

would strive to achieve these goals, that it would have a meaningful impact on ownership diversity, it would use inexpensive, user-friendly procedures, it would be expeditious in terms of application processing and review, clarity and consistency of decision-making, and a minimal need for the commissioner's own involvement in overseeing the day-to-day operations of the programs through which it's applied, and, of course, most important, that to the extent possible, any inherent subjectivity that comes from evaluating applications in this way be reduced.

In the interest of time, I'll leave for questions on how this would work in practice, how the disadvantages would be identified, how a certification could be used as a coin by companies to raise investments and to secure capital, and how the rights of entities that might not be regarded as having been eligible entities can be adequately protected under the standards that courts apply.

MR. LLOYD: Thank you, David. That's an awful lot. So, we've covered, I think, a great deal of ground here. Maureen, did you have some questions or some --

MS. LEWIS: Well, yes. Thank you, Mark, and I wanted to sort of tie back an issue that we identified in the first panel about the lack of data and issues related to the data that we do have about relevance and people identifying lack of relevant content or relevance of broadband technology to their lives as a reason for they're not adopting it. And tying that thought into Commissioner Copp's comments and some of his other statements and others on the panel, including David and others, about broadband access as a civil right. And I'm wondering about whether or not in the language that we use as we characterize and define the problem, that as we talk to underserved communities whether or not we help them to consider adopting this very important technology by talking about broadband access as a civil right and whether or not you think there may

be a way to help bring heightened awareness.

MR. LLOYD: Please, go ahead.

DR. EINSTEIN: Well, I was just going to say because I was sitting here thinking about that, when someone, I forgot who, which one of the panelists mentioned the question of relevance. Who is it? Who said that? That's when you wrote it down.

MR. LLOYD: Allen. I might be Allen.

DR. EINSTEIN: But, in any case, one of the reasons why some people don't see the relevance of it is because what's already there, is because they don't understand how that relates to anything. I mean, part of it is it is a civil right in the sense if you explain to them that if they want access to jobs, opportunities, health care, if they want to get rid of disparities, if they want to improve the quality of their lives, overcome discrimination, have mobility, all the rest of those things, all the goods that society has to offer, that one thing you need to do to access those is to be able to use this. And if

you explain that to them, your civil rights will not be fully realized unless you are able to do this, then you educate them to do it. You don't just say well, what did you see on there that were interested in? And then you say well, let's put some content on there that's directed. That's fine; I'm all for putting content that's targeted at them, specifically directly to people, but there's a lot of stuff that's on the Internet, and there will be more that is useful for people, and they need to have it, and they need to have it right now.

MR. HAMMOND: In previous incarnations, I had to talk to people about the relevance of telecommunications to their lives, and the way I did it was by asking some simple questions like how many of you have a bank branch in your community? No one raised their hand. Well, how many of you have an ATM six blocks from your house? No one raised their hand. Well, how many of you have a hospital that is within 6 blocks or 10 blocks of your house? And no one raised their

hand.

Well, it becomes pretty obvious when you don't have those things available to you and you start thinking about how hospitals have closed branches because of expense, banks have closed branches because of expense, and a move to having services provided online, that if that's the only way for you to get those services, not being online becomes a substantial problem. And I think if you start talking to people about what they have available to them in their daily experience before you relate the relevance of broadband to them, they get it immediately. And I was talking to a bunch of college students in Brooklyn.

MR. BLACKWELL: I would add, Professor Berry, in addition to all the uses that you spoke about, the very basic ability to participate, civic participation in the democratic process. I mean, our most recent election for president, one only needs to look at what happened in that election and how those campaigns were run to see the importance, relevance of the Internet.

In Indian Country, there's a very interesting study that was cited often in the early parts of this decade addressing this very concern for tribes, the concern, if I may re-characterize it a little bit, the concern about the very steep, but short, learning curves about the value of broadband and the Internet. There was study that was done by EDA that asked 50 elected tribal leaders to prioritize their governmental needs, and telecommunications ranked 14th on the list below things like education and law enforcement, public safety, health services. So, there is an ever increasing need to continue to educate, reeducate.

Maureen, also, I appreciate you asking this question because there is an institution that was mentioned in the earlier panel that I work with, Native Public Media. I serve on the tribal advisory committee to Native Public Media, and there are several of us in Indian Country that are looking forward to a report that they're going to be coming out with in November that I would submit

request that the FCC take a good look at. It's called the Blueprint Project, and it is a holistic look and review at how communications and media technologies are used in Indian Country, and you've heard about the terrible anecdotal 5 to 8 percent broadband penetration rate in Indian Country. As we learn more how to use it, we will continue to push for more deployment of services.

DR. EINSTEIN: I don't know whether Mr. Honig was talking about the post-Adaran studies that were done, whether you were just talking about the one at the FCC. I couldn't tell. You were --

MR. LLOYD: Yes.

DR. EINSTEIN: But what I wanted to point out, I was thinking about it because I was involved with that process. It was when Clinton did his mend it, don't end it thing. All of the federal agencies did these studies, so, if you've not looked at them, instead of reinventing the wheel, you might look to see what they came up with, and they all implemented something for

awhile until the politics changed, and see if there's anything that's useful in that because there was a lot of time and energy put into those studies.

MR. LLOYD: Dr. Einstein, you had suggested that the Children's Television Act might be a model to look at to spur the development of content that might promote adoption.

Any comment from the panelists? Do you want to expand on that or is there any comment from the panelists about that idea?

Al?

MS. LEWIS: Well, certainly organizations like One Economy have been very successful in expanding adoption or encouraging adoption by providing content that is relevant to the people that they're serving in housing units, whether it be about jobs or about health or about schools. It's not a surprise and it's not rocket science that a community would do something that would help them find out information about something that they're concerned about or need.

So, I think it might be valuable to examine those already existing laboratories where these things are actually going on and being successful.

When Dr. Einstein mentioned about content, she said as sort of an aside, I guess, that you lawyers will be objecting to that.

DR. EINSTEIN: Yes.

DR. BERRY: Something she said about content, and then, of course, nobody objected when she finished. So, she seems to think that people would object to it. I guess she thought there'd be some First Amendment concern, but we've gone a little bit beyond that.

And you made that point, and I wanted to see what you meant by it, and, also, you made one other one. While I have the floor you could tell me. You said in passing something about evidence, that you shouldn't use religious institutions.

DR. EINSTEIN: Yes.

DR. BERRY: And, in part, because they had difficulty separating proselytizing from the

services.

DR. EINSTEIN: Yes.

DR. BERRY: You said something about proselytizing, and I know that in the whole think-based arena of programs, one of the issues that I've been considering in another connection is whether, indeed, it is true that you can separate the two. So, I just wondered if these were just asides or if you had some substantive study or something.

DR. EINSTEIN: Yes.

DR. BERRY: Or points that you were making.

DR. EINSTEIN: In terms of providing funding to religious organizations as a means of creating content, I have concerns about religious institutions, and actually in my last book, there is some information about the inability particularly of some of the faith-based institutions not separating their proselytizing from the funding that they did, the funding that they got.

So, if they were doing church programs, and I can give you some citations if you want, certain church programs or prison programs, if you were given information about how to transition into out of prison, you were also taught about Jesus and receiving a personal -- and it was supposed to be the sort of thing where, perhaps, there was some kind of a 12-step program or a drug program that the drug program would be on one part of the church and then if anything else would happen, proselytizing would happen somewhere else, but always what seemed to happen is that as soon as someone stepped out of the drug program, everybody stepped outside for a cigarette, and then --

DR. BERRY: Oh.

DR. EINSTEIN: You get the proselytizing. So, it's a very difficult to separate those two things, and if we get into an issue in terms of separation of church and state, that's what my concern is.

DR. BERRY: Then on the content point,

what was --

DR. EINSTEIN: The content point, in terms of religion?

DR. BERRY: (Off mike.)

DR. EINSTEIN: I don't have a problem --

DR. BERRY: No, no, when you said something about lawyers were going to.

DR. EINSTEIN: Oh, lawyers. I thought I was going to get an objection from lawyers in terms of the First Amendment as it relates to saying that we need to regulate content. And you're suggesting that lawyers have moved past that?

DR. BERRY: This lawyer has.

DR. EINSTEIN: (Inaudible) lawyer has moved past that. No, there's other lawyers who say -- I'm surprised, and you were sitting next to me. I thought there would be some legal objection to that when coming out of --

MR. SCHEMENT: No, no objection.

DR. EINSTEIN: I thought there would be some legal objection to that when coming out of

2003, one of my issues was that there's been an awful lot of regulation in terms of structure, and it seems to me that consolidation always comes up. To me, it's a red herring. Consolidation is a red herring, and the big issue is the economic understructure, and as long as organizations or Web Sites or television programs have to aggregate eyeballs, they're going to produce the same programming no matter who it is that's creating the content.

So, that was my issue in terms of that, but if you want different content, I believe that you have to regulate what the content is.

Now, are you going to streamline it to be particular for particular groups, and I think that was to somebody else's point, can you specifically say this is the African-American community? We certainly have to address it because I think those statistics Professor Hammond put up was from the recent Pew study that only 43 percent of African-Americans have broadband in the home. That's deplorable to my mind when you

consider that Americans as a whole, it's 63 percent of Americans have broadband in the home.

But one last point I wanted to make, and a tax onto what some other people were saying.

It seems to me it's a chicken and egg issue in terms of adoption. When people realize that there's content online, then they'll go on, but that they have more interest in broadband, but they don't know that there may be content online, so, they stay away from broadband, and this comes up again and again in terms of different media in terms of people's adoption.

So, to your point, it may not be that we need new content, it's that we need to let particular groups know that content exists that's important for them.

DR. BERRY: And I want to be clearer. I'm only in favor of content regulation if the content that is put on is content I agree with.

(Laughter)

DR. EINSTEIN: Here, here. Okay.

MR. LLOYD: Al, any of the panelists

want to jump in there?

MR. HAMMOND: Well, I guess the First Amendment prohibition and also the Section 326 prohibition against the Commission being involved in dictating content might have something to say about how the Commission proceeds to encourage responsive content. It's one thing to encourage responsive content, another thing to dictate what that should be. And I think that that line is not going to be undrawn in the future.

There are a number of entities that we can encourage. And I think that's where the focus should be.

MR. BLACKWELL: I -- I --

MR. LLOYD: You're hesitating.

MR. BLACKWELL: Well, yes. Hesitant as I am to speak on this particular issue, Dr. Einstein and my colleagues on the panel, I would caution you not to paint with too broad a brush with the definitions that you use when you discuss content regulation. And this coming from a person who was raised in a society that, for a long, long

time, didn't have the opportunity to define their own selves in the media, and only now the first generation that was born into the new era of Federal Indian Policy of self- determination following policies that were designed to stamp out the Indian-ness in Americans.

When you speak of religion and when you speak of content regulation, there is a renaissance of tribal culture that is happening right now in Indian Country, and many tribes are interested in getting involved in the communications revolution to support, to take control and develop culturally-appropriate uses for themselves, and what you may define as "religion," other tribes may define as the way.

So, I only share that to try to add a little perspective to the panel. Thank you.

MR. LLOYD: So, please, we're encouraging a discussion among the panel. Please jump in.

MR. HENDERSON: Well, I was just going to say that I think most lawyers would say that

regulating content to the extent you were trying to exclude it would run afoul the First Amendment. On the other hand, promoting or encouraging content to serve communities that may otherwise not be served is a different matter. And I think there are ways to do that permissibly.

The other point I wanted to make, and, again, because I don't know a lot about the subject matter here, and my knowledge is somewhat limited, but in terms of the discussion about adoption and use and so forth, it seems to me that it bears careful study and analysis as to why that's so.

Some of it certainly may be simply a matter of individual preferences or what have you, but I think if history teaches us anything in this country, there are often far deeper, more powerful institutional forces that have determined who has access to what, and how people get access to things that need to be carefully examined.

We are a historical country. We like to think that everything is fine, anything that was

troublesome about race or gender or ethnicity is somehow in the past. After all, we now have a black president, so, it must be true. And the problem is we don't go back and look carefully. We don't look at what's going on now and what's happening now and why things are the way they are now in the context of our history, the history of this industry, the history of access to resources.

So, while there are certainly other things that should be looked at, I would suggest that things, our own history teaches us that we have to look very, very carefully at the forces that are at work and what are the barriers? Why is there limited access, and what are the barriers to identifying them, and then design effective approaches to overcome them.

MR. BLACKWELL: May I follow on that?

MR. LLOYD: Very quickly, and then we're going to try to get some questions from the audience.

MR. BLACKWELL: Okay. I think Indian Country is a perfect example of what you just

mentioned. I mentioned earlier that the tribal governments were left out of the 34 Act and the 1996 Telecom Act. It may behoove the FCC to engage in a dialogue that begins to recognize that the larger, economic, competitive framework doesn't operate to success in certain parts of the United States, in certain places and certain communities.

I mentioned earlier to you, Mark, that one sizes fits none. What we've learned over the last 10 years since the FCC began working directly with tribes is that the business models in Indian Country, there may be a variety of different types of entities involved, they may be carrier- driven, it may be tribal and industry-driven, public-private partnership, or, in many cases, it's tribes becoming de facto carriers of last resort. But what we've learned is that in every situation, there is a tribal-centric approach to the business model that recognizes we're talking about a remote, cyclically-impoverished region of the country that shares some cultural

commonalities.

So, let me say this: One of the exciting things to me when I read the Stimulus Bill and the provisions for the stimulus monies for broadband is that they enumerated all of the community-oriented regulatory goals for those monies, and my hope was that it signaled a step in regulation that recognized the value of community as much as the value of competition.

There are tribal leaders who participate in the Telecommunications Subcommittee at the National Congress of American Indians that I chair that stand up and say we've been forced to invest our own monies. We've been forced to dig deep into our pot and create these networks. And once those networks are created, those become an asset and trust resource of our nation.

So, please, Federal Government, don't regulate in a way that unknowingly changes the market that can obviate the operation of this business model that was created in places like Eagle Butte, South Dakota, rather than K Street

and Wall Street.

Thank you.

MR. LLOYD: So, we have a number of questions from the audience. One says, "For Mr. Hammond. What legally can be done to bring back resale and network access opportunities for small business and entrepreneurs?

MR. HAMMOND: Well, I think the Commission would have to revisit some of its decisions with regard to the unbundled network elements that were, for awhile, made available in the 251 and 252 of the Telecom Act of 1996. And to do so in light of the recognized value that broadband has and the fact that there are pockets of non-deployment or under-deployment, certainly areas that are un-served and underserved that will not get that service unless small entities enter those markets, provide those services, and that in order for those wisps, if you will, and collects to be successful in getting the traffic out of those communities and into the major networks, they're going to have to have interconnection

policies, they're going to have to have access to certain elements of the larger networks in order to make that work.

That's what I meant by you can't have a policy favoring increased broadband deployment in areas that are underserved or un-served and not recognize that they're going to operate in a broader, regulatory, and economic environment. So, in order to be successful, in order to get the information from Google or from other places, remote sites, you're going to have to pull that information in or you're going to have to go outside the sort of geographic boundaries of that small entity to get access to it. And that's going to require interconnection with all the rest of the networks.

What 151 says in the preamble is to make available to all Americans a nationwide and worldwide communication system, not a four-block wide or a six-block wide or small territory-wide communication system. So, that's what I would suggest.

MR. LLOYD: Thank you. This is from Eric Garvane, if I'm pronouncing it correctly, Garvane, Garvane.

What are the legal barriers and opportunities for low-income individuals who want to develop innovative and invention to increase adoption access?

One of the things that we've talked about, disability, we've talked about Native Americans, we've talked about race. We haven't talked about class and whether there's anything regarding poverty status that the Federal Government needs to do or just needs to be cognizant of regarding its actions.

Any thoughts from the panel about that? David?

MR. HONIG: We didn't focus on it in the Diversity Committee, except to the extent that the overcoming of poverty might be predictive of success in entrepreneurship in FCC-regulated or influenced industry. Certainly if capital is required, your current low-income status might not

be helpful irrespective of other values. But you're overcoming it might, and it might also tend to be somewhat predictive of your knowledge of that community from whence you came, its needs, and how you could, as Al was just saying, be responsive to those needs in ways that other companies might not have the knowledge or institutional expertise to do.

MR. LLOYD: Mara?

DR. BERRY: Yes, I think that's right. But I also think that empowering the poor should always be a goal on its own. Not a goal instead of, but an additional goal. And there will be overlap, of course, because many of the groups that we're talking about are disproportionately poor. But that recognizing that there are class differences and recognizing that there is poverty, I mean, it's deal all across society now, and we do it for higher education access, we do it everywhere, that not just as one element of trying to figure out who's disadvantaged and trying to get to a race-neutral policy or something, which

is important. So, I think empowering the poor ought to be one of the goals that you ought to consider. And, of course, you don't have the legal problem because there's no strict scrutiny. Yes.

MR. LLOYD: To Thomas, did you want to --

MR. HENDERSON: Well, I was just going to say that, to take off on the point that Mara just made, that because, unfortunately, the Supreme Court decided some time ago that poverty was not a suspect classification, therefore, however, the only upside of that is that a government entity can take actions designed to assist folks on the basis of income or poverty without being subject to strict scrutiny.

And I would say that goes at the consumer level, that level, as well as, for example, the Department of Transportation program I referred to that is a disadvantaged business program. Race and gender will get you into that status, but so will other forms of disadvantage,

including poverty and so forth.

I was concerned with, I think, the comments of Professor Einstein, were eye-opening about the old media looking a lot like new media when it's driven by advertising, and, so, the opportunity for disadvantaged businesses to get in and participate also is an opportunity.

MR. LLOYD: Sure. Please, Geoff.

MR. BLACKWELL: You have a speaker on your next panel that I don't want to preview or involvement, but Toni Bush, who chairs the Telecom and Broadband Issue Subcommittee of the Diversity Advisory Committee, it's why I don't serve under her chairmanship of that subcommittee, as well, and we worked on a recommendation involving the Universal Service Lifeline and Link-Up Programs that the recommendations to the Commission implement those in the broadband context, as well. And it's important to note, I think, that from our perspective in Indian Country, the Enhanced Tribal Lands Lifeline and Link-Up Program, much as Professor Berry said, it is not a racial program,

it is a jurisdictional, it is an income-based program and has operated in great success on tribal lands. It is for those income persons, Indian, non- member-Indian, and non-Indian on tribal lands.

We also very quickly brushed over the last question. I have a suggestion on your last question in terms of opening up new opportunities.

It's a little bit further a field from the unbundled network elements regulations, but the Commission may consider reexamining the secondary markets rules for access to spectrum. We found that in Indian Country, there is not a lack of spectrum, there's a lack of access to it, and there are many regulatees above our lands that just simply don't have the business model that allows them to provide meaningful services. And I would inject the idea that in a review of those rules, there's all sort of rules, that there be the concept of demand aggregation for the uses of these spectrums, as well.

Thank you.

MR. LLOYD: Al?

MR. HAMMOND: One more point on the universal service concept, and that is that, right now, the Universal Service Fund is under a tremendous amount of pressure, at least the larger entities that are providing a substantial amount of that money are facing competition and perceive that as cutting into the size of the fund, and there are questions about who's to be eligible for continuation of that fund, if it's for build out, and there are also questions about whether or not the eligibility in terms of Lifeline and Link- Up are going to be changed, as well.

So, again, you can't make decisions on one area without being aware of the pressures that are going to come from other areas.

DR. BERRY: Can I just say this?

MR. LLOYD: Please. Sure.

DR. BERRY: That's the second time that Professor Hammond has made that point, which I think is the most important point that has been made here today. He's made it in two different

ways. That whatever you're doing here at the FCC, you have to, as you develop this policy, look at everything you do to see how it fits, doesn't fit, how it will work with the policy goal that you have for this access and utilization because there's a tendency in organizations to simply focus on the one thing you're supposed to be working on, and to try to develop something that'll make that work without looking to see that all the moving parts have some kind -- there's a resistance, too, in organizations for people who are doing parts of other things of having whatever they're doing evaluated in light of how it fits with what you're trying to do.

So, and it's important to do that, also, for a legal reason. When I talked earlier about alternatives and showing that you have pursued alternatives, one of the ways you do that is by this wholesale kind of review of everything and seeing if there's some different way to put things together, and that's what you show when you're under legal attack for these things.

And the last point I'll make because I'm just trying to do this so I won't forget is that when you are analyzing in terms of possible legal attacks and when you develop the strategy, make sure you include the views of people who don't agree with you. And then analyze them. And that's because there's a tendency in organizations when we do plans like this to only include what we believe and not include and dissect the objections that are raised at every point about everything that we plan to do.

Okay. I'm done.

SPEAKER: (Off mike) a question.

MR. LLOYD: Just if you could write the questions down so that we can make sure we've got it on mike. And, Calvin, if you could --

SPEAKER: (Off mike) it's a very easy question. I'm not the world's best writer. I would really like to ask this question.

TV is free in this country. The FCC, years ago, passed that television would be free, and I think in this country we're really serious

about everyone really getting broadband. I think the FCC is going to have to look at a way, how can we bring about free broadband to a lot of the poor areas?

For instance, persons who live in public housing. We have many many people --

MR. LLOYD: And, so, the question is then --

SPEAKER: So, the question is: Could that be a recommendation that the FCC would make that a percentage, so many hours that persons could have free broadband if you live in poor areas and the rural areas of this country?

MR. LLOYD: Okay.

SPEAKER: How we do TV. And I just want to say that --

MR. LLOYD: Okay, so --

SPEAKER: Free TV and cable TV are two different things, but if a home wants cable, they have to pay extra, but if a home can't pay for that, they can plug in their TV and still get so many local channels of free TV.

MR. LLOYD: All right.

SPEAKER: Free information.

MR. LLOYD: All right. So, we're going to make sure that we write questions down to try to keep them short, but, David, did you want to try to address that?

MR. HONIG: There are two proceedings in which that question is being teed up now without expressing an opinion on them. One of them is an adjudication involving a company that wants to provide a free, national, wireless broadband service to 95 percent of the country, and that application is pending. And the other is the question of whether to extend the Lifeline and Link-Up Programs to include broadband or, perhaps, create a parallel program that includes broadband, and, thus, reduces the cost for those who are not online because primarily of issues of affordability.

There is also an element of what you've asked and what Professor Hammond has said that makes it difficult for many new entrants to offer

a service for free, and much of that was teed up in Commissioner McDowell's workshop yesterday on capital formation, and that is that it's always been difficult in any FCC-regulated industry for small businesses and disadvantaged businesses to raise capital. It is especially difficult in the broadband space.

Among others really, two main reasons: One is that investors want to know when they're going to get paid. And that means when you're going to sell the business to someone else. Well, right now, new industry, we don't know who's going to be there in five years to buy the business. We've certainly seen that because this is such a disruptive technology, the winners and losers that you predict today might be a complete different set of winners and losers in just two or three years. Look what happened to CLECs, for example.

And, second, that certainly is exemplified by what happened after the 2006 changes to the designated entity rules. Not only is regulation regarded by many investors as

particularly discouraging to investment, it's not knowing what the regulations will be, the lack of servitude and predictability, and, thus, the ability to make long-term business plans irrespective of what the regulation ends up being that causes this program, so that if you are a small business coming in and you want to do something as unique as offering a free service as attendant to what you're doing, that requires a measure of risk that the market isn't tolerating for reasons other than the fact that it's free and unique and innovative or needed.

MR. LLOYD: So, Al, you wanted to address this, as well?

MR. HAMMOND: Just one of the ways in which there's been an attempt to make the Internet free or broadband free was the use of free or unrestricted spectrum in the wireless realm, and that's what Wi-Fi basically was. The idea was that you didn't charge for the spectrum, and, therefore, you're reduced to economic barred entry for companies coming into the space.

They were then able to come up with models that didn't require such an upfront cost to the individual subscriber. But there are tradeoffs, and when we work with a group that tried to create a 41-jurisdiction wireless and broadband network in California, one of those tradeoffs that was proposed was that there would be a different protections for privacy rights, for instance, of those who got the service for free and also be more advertising because it was an advertising model, not unlike free TV, that was going to be used. But the problem with that is that then you can't -- I don't know about you, but when I go online and I go to certain sites, I can't move down to the information I want because I got to look at this ad first before I can get there. But that ad is there to sort of finance the access that I'm getting.

So, there are models available for that, I just hope that the FCC at least with regard to spectrum will consider those with regard to white spaces, for instance, as a spectrum that if it's

made available for free, would stimulate not a rebirth, but an enhancement of what was done in Wi-Fi because the spectrum technology has certain propagation characteristics that allow it to penetrate buildings and go through trees, which Wi-Fi doesn't do. But there's certainly opportunities to do that.

MR. LLOYD: So, I've got two questions here from Janelle. One is that the FCC has employed race-neutral means since 1995 to foster diverse ownership in telecommunications, however, there are still low levels of diverse participation. What does that FCC need to show to modify its small business policies? I think that's sort of -- well, that's one question.

Another question is: The FCC study when being number one, which was really the civil rights (inaudible) policies, but we'll call it the FCC study. The FCC study when being number one is not enough, talking about no urban or racial dictates illustrated that market forces are distorted and discriminatory when advertising

dollars are involved.

If content for all people is to flourish, how should the FCC address the reality of minority owners that are harmed by such discrimination?

So, any -- Thomas then David.

MR. HENDERSON: Yes.

MR. LLOYD: Either one of those.

MR. HENDERSON: The short answer to the first question, I think, is that to be candid about it, that the FCC needs to go back and take a look at its history. I've done a little bit of that as to what data is available because I think the data will show that at least the FCC was involved in what was a discriminatory market and the discriminatory distribution of licenses. I think there's a long history there, not unlike the history of any other institution in this country. That would provide the basis for remedial efforts to counteract that.

My concern is that the FCC has -- it seemed to me from my limited exposure -- tried to

take refuge in the diversity language in the statute and never really faced up to squarely the history of discrimination in this industry and its responsibility as a federal entity to respond to and to remedy the effects of that discrimination. I think it needs to do that now, and I think that's the reason that it got into trouble in the Lutheran Church Case and others, and it needs to be squarely faced and remedied, but you've got to do the homework to do that and the hard work of putting that together.

So, that's my relatively short answer to your first question.

My relatively short answer to your second question, which I think the fact that advertising is continuing to drive what's available is one illustration of why I think it is critically important for the FCC to carefully consider and craft a non-discrimination regulation with respect to the use of the resources that it has regulated because the ability to act to prevent discrimination would empower the FCC to do

a lot. There's a lot that you can do, including requiring that the actions of actors in the field or in the industry not have the effect of discriminating or the unjustified effect of discriminating.

So, I think that would be a huge and powerful tool and mechanism to carefully regulate to prevent discrimination in advertising and other needs from really affecting what's there and who has access.

DR. EINSTEIN: Can I take some --

MR. LLOYD: So, Mara, then David. Yes, please. Go ahead.

DR. EINSTEIN: I have to say I was really shocked about a year ago; I attended a conference called the Future of Television, what's happening in television, and it was all about things like blip.tv and Break Media and all these new broadband content providers, and every last of them said that advertising was going to be the revenue model. I mean, I couldn't believe it; you could have knocked me off my chair. These are

supposed to be all the newest, latest television, and they're coming up with the same sort of things. Remember a year ago, we were in the midst of the beginning of the recession, and, so, that's exactly the time when the bottom is going to fall out of the advertising market, and that's what people are looking to fund what is going to be the existing content, which, to me, made absolutely no sense.

That being said, whether it's an NPR kind of thing or a CPB example or some kind of government funding so that there's a place where content other than that that is supported by advertising money can exist within the broadband space, but there also has to be funding for the marketing of it, and that's a real argument I'm trying to make here. Given how ubiquitous the Internet is and how much information is on there, the only ones we're hearing about are sort of the information that's provided by the big providers who have the money to tell us that that stuff exists. There's lots of other information out

there, but unless you're a researcher and know how to get it, you can't reach it. And we have to be very good at teaching broad parts of our public what exists.

The other thing I wanted to suggest also is some of you might have seen this last week. An investor had invested in a new community news organization, but the staffing of that was going to be provided by the local NPR station and also by the local journalism school, the graduate journalism school.

So, that's the other issue when you start to bring new content into this space is you have to have a staff that's able to constantly put up new information because if you're not putting up new information all the time, you don't end up at the top of the Google search. Right? And the content has to be new and updated, so, you have to have the staffing for that sort of thing. So, also new and innovative ways has to be understood about how to put the manpower and the labor behind these Web Sites, as well.

MR. LLOYD: Good. Thank you. David?

MR. HONIG: I want to address both of Janelle's questions. There were two cases, well, several, but two that I want to just flag in the Supreme Court that addressed this question of race-neutral remedies, and what had to be undertaken by a governmental unit before it could consider race-conscious remedies.

In the City of Richmond v. Croson in 1989, one issue that arose was must each and every conceivable race-neutral method be tried and have had to have failed before a race-conscious remedy could be considered, and the answer was no, a reasonable subset of them must, but not every conceivable one that the power of the mind of man or woman can think of.

In 2007, I think it was, parents involved, Justice Kennedy's opinion.

DR. BERRY: 2006.

MR. HONIG: It seemed to change that, and if I read it correctly, it is that virtually everything that can be thought of that is

race-neutral must have been tried and have failed before one can consider a race-conscious remedy.

Now, in the case of the FCC, the one thing that it could do that would certainly both make sure that maybe race-neutral remedies could work is to actually try them, and then if they don't work, to be in the position to consider race-conscious remedies fairly quickly.

There are some 44 still pending recommendations by the Diversity Committee, some of them arising from 2004, 2005, a prolific period, still waiting for Commission action. In just the broadcasting field, there are 14 proposals still teed up a year-and-a-half comments have been filed, going to how to diversify broadcast ownership, all race-neutral, all deregulatory, and we're still waiting. And some of them dated back to 1970s.

The example that Janelle mentioned, the rule against advertising discrimination, it provides a good example of why the Commission should really act a little quicker and have a

higher priority so this doesn't happen to broadband.

That proposal to ban discrimination in advertising, the involvement of it by FCC licensees was first made by NABOB in 1984. It took five tries to get the Commission to adopt it. Finally, in December 2007, it was adopted through the initiative largely of Commissioner Adelstein and Commissioner McDowell. We're still waiting for the appointment of a compliance officer to enforce this rule, which is the first new civil rights mandate by any federal agency since 1977, and the first one that was unopposed in history.

How much money is involved here? If you take the Ofori and Napoli studies, Napoli's was (inaudible) in 2002, and extrapolate this, it's about $200 million a year that minority broadcasters alone earned, but never collect.

Now, how can we make sure that this doesn't happen, this infection of the free marketplace by racial discrimination in broadband and affecting broadband content?

Well, the Federal Trade Commission is going to have to either use its existing authority or find new authority to work in this area. The one thing that this commission could do that would be useful would be to reach out to its sister agency and say please help us to enforce the rule that we have and to extend it platform-neutrally to all similar technologies.

MR. LLOYD: So, I'm going to give Mara the last word, and, unfortunately, we're going to have to close. We're a little over time.

DR. EINSTEIN: I'm going to talk fast.

MR. LLOYD: I've been given the --

DR. EINSTEIN: I'm going to talk real fast.

MR. LLOYD: Okay. Go right ahead.

DR. EINSTEIN: Real, real fast. On your first question only I'm addressing about the history, and I agree with Tom, and I wanted to say that there's a lot of information about the history of the FCC in that Window Dressing Report that I referred to earlier, and in a book that I

published -- I'm not trying to sell it, you can get it at the library. It's called "And Justice for All," and it's a history of the Civil Rights Commission in the struggle for civil rights in this country, and it has a lot of information about the reaction to the report, stuff the FCC did during the Civil Rights Movement, and what it condoned, and what it has done since, and I think for this policy statement, I'm persuaded that you ought to talk not just about diversity, but you ought to talk about the history of the FCC's culpability which it needs to remedy with some detail, and the reason why you need to do that, this court that sits now doesn't much like history. I'm talking about the Supreme Court. When it comes to race, especially. But you ought to tell it anyway because the court may change or they may decide to read it, and who knows? But it's important to do that to lay a predicate for the discussion of something beyond race neutral, and on the various alternatives on race neutral and how many you have to exhaust.

I agree with what David said about the Seattle Case, but other federal agencies have tried other things that were race-neutral in response to that 1995 Adarand, and since then, with varying degrees. So, you might be able to look at some of things that they have already done, even if the FCC hasn't done them and it didn't work, by the way, and then you would be able to say tick off that one, and that's all of what I meant in the beginning when I talked about looking at alternatives and making clear that you have said that you looked at them.

Thank you.

MR. LLOYD: Well, thank you for bringing us back around.

So, this has been a rich and very informative panel. We're going to take a lunch break for about an hour and come back with a discussion about best practices and how to move this forward, and thank the panel very much for joining us.

(Applause)

(Recess)

MR. LLOYD: So, thank you again for joining us. I know we've got a number of folks who went out for lunch. Some of them will be coming back, but we need to end at 2:00 (sic) because it's Friday and people have got a weekend to attend to.

SPEAKER: It's 2:00. You meant 4:00.

MR. LLOYD: Yes, we end at 4:00. I'm sorry. Again, my name is Mark Lloyd, I'm associate general counsel and chief diversity officer here at the Federal Communications Commission. This is a workshop today looking at diversity and civil rights issues in broadband adoption and access.

Antoinette Cook Bush and I sat down and talked about what this panel was about, and she got so excited and focused about the need to talk about best practices and what's really working now that can really help this broadband plan and stop wasting your time with all this abstract stuff, and I said you sound an awful lot like Blair here

at the FCC trying to get us focused, and, so, Toni really helped to pull this panel together.

And I think we're just going to get right to it. I think the challenge facing the broadband team is trying to figure out exactly the question that Toni posed, which is what realistically can we start getting going on? And we've got a good, diverse group of presenters here to do that, and Toni's going to bat cleanup to sort of help us focus again and pull things around.

And we're going to start with a good friend, Laura Efurd, who is with ZeroDivide. You used to be the Community Technology Foundation, I think.

MS. EFURD: That's correct. (Off mike.)

MR. LLOYD: In California. And one of the things that I was really interested with Laura sort of coming in is that you actually fund people to do best practices, and you might actually have some idea about what they are, and, so, why don't we start with you?

MS. EFURD: Great. Thank you, Mark. Good afternoon.

Well, the good news is that there are a lot of things happening out there and a lot of good programs that are going on, and, so, I just want to tell you a little bit about what we've learned over the last 10 years.

ZeroDivide is a public foundation that has invested close to $50 million in technology adoption programs in California specifically to really address issues in underserved communities. For us, we look at these communities as low income, minority, the immigrant community, non-English-speaking, seniors, and disability community. Anyone who's not adopting technology like broadband at the same rates as the general population.

And, so, although we learned earlier broadband is on the rise, but there are still a number of communities that are not fully utilizing this technology. I think some of the panelists earlier today really emphasized some data that

shows these points, and what was really gratifying to me is this is actually what we're finding at the ground level, as well, that while income level is a key indicator of who is adopting broadband, there are also other factors, such as race, age, disability status, place of residence, or geography can also be a determinant factor of whether someone is a broadband user or subscriber.

Really what we found is that technology adoption or the term "digital divide" is really a part of a larger set of divides, it's part of the political, economic, cultural divide that happens in this country, and, so, we need to look at it and address it at the level in a holistic way.

Sometimes, the data doesn't even tell us exactly what's happening in the world today. We talked a little bit about, for example, data around Asian-Americans and whether it's showing us the true picture there. Some might be really surprised to know that even in the very heart of technology-savvy San Francisco, Chinatown actually does not have a lot of broadband access, and they

have among the lowest rates of broadband users in San Francisco.

So, while access and affordability are key issues driving broadband adoption in these communities, ZeroDivide has learned that barriers to adoption are complex, they vary among different populations, it's not the same. They cannot always be resolved with a one-size-fits-all approach.

Some of the other issues that we found really impact the population's ability to adopt broadband include relevance, and a lot was talked about this morning in terms of things that are really relevant to people's lives. And, so, some of the programs that we've come across, like the Mural Music and Arts Program in East Palo Alto and the DJ Project in San Francisco use the genre of hip-hop to engage young people in learning technology and broadband applications.

Now, all of them may not come out these programs as the next breakout hip-hop artist of their generation, but they will learn technical

skills that will help them in their educational pursuits and in their jobs.

Other issues are content and applications. A recent report by the Tomas Rivera Policy Institute study showed that, for the Hispanic community, voiceover IP might be a great driver for broadband adoption because they can then connect with members of their families overseas quite readily and at much lower costs than through typical telephone.

Language is an issue, training and technical support, and, of course, also privacy and security concerns. Some of these things were brought up earlier today.

So, let's talk a little bit about what works. So, over the last several years, what we found that really works is number one is leadership. So, really building leadership in underserved communities that understand the value of broadband and its applications, this has been a key driver to technology adoption, and what happens is these leaders actually serve as

translators for their community. They conduct outreach, they start new programs, they're entrepreneurs, and create new applications that the community can choose, and, often, they're not found in traditional leadership positions.

They may actually be the mom in the neighborhood that all the kids go to her house or she's the connector in the community, and, so, she really understands the value to education for her kids to be involved in technology.

So, one of the key issues is really building the capacity of these non-traditional leaders to promote technology and broadband in their communities.

The other is relevant content, and we talked a lot about this earlier, so, I'm not going to talk that much about it today because we all know people have to find or use the technology for something that they really are interested in.

The key point I want to bring up here that wasn't brought up earlier is what we found particularly in the last three or four years is

that it's not just availability of the content online that drives people to use it, but it's actually the ability to be a content creator themselves, right? So, for people who could actually post videos, to do podcasts, to do blogs, to interact with their peers online, that is what is driving people online in addition to other kinds of things like finding employment or looking at health care information online, but it's just really this notion that you, too, can participate, that you can be a content creator that has really driven people to become more interested in broadband and online.

The content has to be relevant. This post on the slide from Generations Online really looked at how do we get seniors online? So, they have a very easy, step-by-step application and training of how to actually connect online, and they focus on things like connecting with people from your past and looking at photos and memories. They focus on how do I connect with my children or grandchildren online, and those kinds of things.

The other key point really is about focusing on community-based organizations and building an ecosystem for broadband adoption in a community.

This example that I'm showing is Little Tokyo, which is a part of Los Angeles. They actually have about 400,000 residents, a very low-income area. Half their population is under the poverty line. And what they have done there is they've created a wireless system. They provide free broadband outdoors and they also provide training through a community technology center, and they've actually blanketed the community with free wireless, have actually helped 158 homes get broadband within their homes through this wireless system, and train them how to use the technology. And, so, these low-income individuals are actually connecting.

Another major issue and things that we found worked is sustainability. That was a key thing for us. We were created in the heyday of folks investing both from the public sector and

private sector in bridging the digital divide.

Over the last 10 years, we've seen our peers disappear. Very few foundations investing in technology adoption these days. And, so, what we realized was we needed to help these organizations who are helping people connect to technology become sustainable themselves. So, they would become community assets in the community for the long-term.

And, so, an example of that is Change Agent Productions, which is associated with a YMCA in Long Beach, California. They have been training young people on multimedia technology, how to do videos, how to connect to broadband for several years now, and, so, what they've done is they developed a small production company where the young people actually produce videos, Web Sites, do training for a private sector and public sector companies, and they actually make money. So, in their first year, they earned $110,000. That's gross. They were able to actually make a profit of about -- that's actually a typo on my

slide. It's $17,000, and they trained and recruited over 100 minority youth to do this, who actually got paid to do the work. So, not only did they see that they could help sustain their organization that was helping them, they also saw the value of their own work.

The other great thing about Change Agent Productions is their rates of graduation of the students who participate in their program is about 95 percent, graduation from high school. Long Beach Unified, the graduation rate is about 80 percent. So, they're making an impact in their educational, as well as their economic opportunities for the future.

The last example I want to give is Youth Radio out of Oakland, California. Getting back to a lot of what was talked about in the earlier panels about creating content, this is an organization that are helping at-risk youth not only learn how to use technology, but actually create content themselves. Thirteen hours of youth-produced editors creating digital media.

They trained 100 new youth producers, and their productions are viewed online, they're on radio, they're picked up by NPR. So, this is a real way to get more diverse content into the realm and also allow youth to see that they can actually produce that content and make a difference and connect to broadband.

So, I'm going to end my presentation there and look forward to the question and answer session.

MR. LLOYD: Great. Thanks, Laura. As the president of the National Urban Technology, did you found the National Urban -- wow, president and founder of the National Urban Technology Center. Patricia Bransford, we're really sort of interested in, there's been an awful lot of talk about the importance of broadband for entertainment, perhaps not as much talk about the importance of broadband for education, and, so, really looking forward to your presentation.

MS. BRANSFORD: Thank you. I am honored to be here, and I must say encouraged by the

political will that I have heard in this room this morning.

We are entering, I think, an era where we have an administration that is squarely behind us, that is committing a fair amount of stimulus funding to accomplish some of the goals that we've been looking at for the last 10 years. I would say Laura's organization started about the same time that Urban Tech did. In fact, she gave the first part of my presentation, which is going to make it easy for me, which is to build this ecosystem of neighborhood centers where people can actually go and learn how to use the applications, where we can conduct after-school programs where kids can do all the wonderful things that Laura was talking about.

What we have found though in the last 10, 15 years is that these are very exclusive (inaudible) and people don't go outside of those centers, and I've had many people just say to me, Pat, I want to learn word processing. Where can I go?

Well, if you haven't been funded by Boys and Girls or by another organization, you really don't feel welcome, and, so, I was happy to see the latest Department of Commerce NOFA that talked about public centers, but now we've got to be concerned with libraries closing and other public centers that aren't sustainable.

We actually are very excited about moving to a digital campus, quite frankly. One place where our young people can come to get state-of-the-art curriculum, that is designed around storytelling, and I'm looking at this woman right here because she came to me at break and she said, Internet, the Web has got to be more conducive to people with different learning styles. And that's what we're all about.

What we have learned over the last 15 years is that technology can be very effective in turning on that light bulb and awakening those spirits, especially the young people who are in that 30 percent who have not gotten a high school diploma, whose parents have not gotten a high

school diploma, and, therefore, will have children without a high school diploma. We need to really focus on that 30 percent in, I think, the next 10 years and spend stimulus money providing civil rights, as Mary said, to that group of individuals who are cut off, virtually cut off from education today.

My peers that I'm working with are telling me that they come to school in the morning, they leave for lunch, and never come back. We have 50 percent on average dropout in this country. In some cities, in Baltimore, it's 77 percent.

And, as an IBMer who has worked 30 years in solving corporate problems, I want to tell you that technology can solve that problem. But it's not using word processing necessarily or some of the tools that are fun to use, it's actually using technology strategically in the classroom to make learning more visual, to provide opportunities for animation and multimedia, rich multimedia interactive exercises, and then having those young

people be able to communicate with their peers using networking strategies that everybody's using with Facebook and LinkedIn and what have you.

So, we need to really step back now and say we've gone through our first chapter that was spearheaded by the Clinton Administration where we all got our grants from TIIAP and other grants to go out and build centers. Now we want to look at more strategic use of technology in education to include those 30 percent that are dropping out today.

I'm way ahead of these slides because I know that Laura really gave my pitch. So, I'm just going to (inaudible) it so quickly. That's our mission statement. I also have some handouts here. But just bottom line, just like ZeroDivide, which was the Community Technology --

MS. EFURD: Foundation.

MS. BRANSFORD: Foundation, we started in 1995 to provide technology resources to schools and community-based organizations in low-income communities that were on the dirt road to the

Super Highway. But, as we built those centers, we realized that we needed content, we needed training, we needed applications that helped solve community problems because many of the 750 centers that we have put in over the last 15 years have actually languished because they either didn't have the content to continue to engage the community or they could not find the resources or the funding to continue to pay for the support of their centers.

And, so, that is one challenge that I think the FCC has to look at in the next few years, is how do we continue to build the capacity in the centers, in neighborhoods that are helping people today, and then how do you give those centers mobile technology that they can actually go out to a home in a neighborhood where maybe 12 to 15 people are gathered for training. So, we need to move out into the community now where people are because a lot of people aren't coming to centers. And, so, that's one thing that we have learned.

This just says that we have reached about 1 million people. It is basically in partnership with Department of Justice, who was our first big partner in Weed and Seed Sites, and, so, we are actually the technology provider that builds capacity in those centers.

But, as we were looking at content, we found that young people were very excited about technology and that we could teach social and emotional skills. We could build life skills that are so important for academic achievement, and we also think that the next breakthrough application is to build assessment tools that actually look at those impacts of life experiences and collect data that we can then use to correct problems as they occur.

I'll just give one example. I just need to know when I'm running out of time. I'm not sure how to read the timer. Are you going to tell me?

MR. LLOYD: Okay, you have about two minutes. You have about two minutes.

MS. EFURD: Okay. I'm just going to tell a quick story that I think really illustrates the importance of what I'm saying. And it's really analogist to the electronic health records, by the way, that we see are really actually a commitment of this administration with a lot of funding behind it. This would be an assessment of every student from the time that student comes to school, pre-school until high school, looking at social, emotional skills, leadership, social development, because those are the skills that are necessary for academic achievement.

The quick story is, this June, we were visiting our grandson in California. He goes to very fine school, and he's a gifted student, and he got his report card and he got all As in the academics, but there was one line there, Tommy feeds into negative behavior in the classroom.

Now, this came in June, his mother had no idea when it occurred. It could have occurred February, March. She didn't know what the negative behavior was. She didn't know even how

to discipline him or if she should discipline him. I said, why don't you e-mail the teacher? The teacher was on vacation by then. It was later in June. But one teacher did e-mail her back and said there was just one person that wanted to put that on the report card.

So, in my mind, that was a teaching moment. That was a time when teachers or the educators actually could have looked at what are the best ways to use this moment to make Tommy a leader, to make him more positive about education, to give him, if you will, enthusiasm for moving ahead. And, so, I would say that if we can build those data systems, large data warehouses like Amazon.com has that says this is the way this student learns and this is the way we need to give him the opportunities that he needs to move ahead.

I think that I'm out of time, so, I'll take a break here and wait until the questions. How's that?

MR. LLOYD: That's great. Thank you.

MS. EFURD: Okay.

MR. LLOYD: Thank you very much. So, Heather Dawn Thompson, partner in law firm Sonnenschein Nath & Rosenthal, LLP. We've been talking an awful lot about the challenges in Native American Land, but there are some things that are actually working, I understand. So, could you sort of give us at least somewhat of a brighter picture about service to Native American Land?

MS. THOMPSON: Sure. Thank you so much for having us here, Mark, and we really appreciate being included in these panels.

(Speaking in Lakota) My name is (speaking in Lakota). My English name is Heather Dawn Thompson. I am from the Cheyenne River Sioux Reservation in South Dakota, and I am now a partner here in D.C. at Sonnenschein, and I work with several tribal governments regarding their telecommunications issues. And, so, we're just

delighted to be here and be included. Thank you so much.

I know that Mark and Geoff were here earlier on some of the panels, and, so, they've gone over some of the challenges in Indian Country. In many respects, we share many of the similar issues with other minority communities with access and a lot of dissimilar concerns from both a legal and a social and economic perspective.

With that said, there are, of course, some very unique things within tribal communities because we, in addition to being minority groups, are also governments. And we receive our services through our tribal governments. There are over 560 governments in the United States, tribal governments still, and we, unfortunately, continue to be some of the most impoverished and least-accessible.

In your history books, you sort of remember where they put the Indians. Well, we're sort of still there. And it's sort of hard to get

there, and it's hard to get telecommunications there.

I always tell a couple of funny stories. These are cell phone related, but they have similar overplay in the broadband area.

For a very long time when I would go home with my cell phone, the cell service literally stopped as soon as you crossed the Indian border onto Indian reservation. I'm from South Dakota. I'd be driving, talking on the phone, I cross the reservation border, and my cell service would stop. So, whenever I was home, I'd have to drive about an hour-and-a-half from my grandmother's house across the border in the adjoining, non-Indian community in order to talk on the phone, send my e-mails, do my text, and then go back home for the night. And we're sort of very similar, unfortunately, in the broadband arena. You can have complete service surrounding you, and then it just sort of stops at the reservation borders.

And Mark and Geoff went through some of

the reasons why that's true earlier as far as data and access, but, unfortunately, I think one of the simplest explanations and one of the reasons why there are some success stories which I'm going to go into is that a lot of people aren't familiar with tribal governments. It's uncomfortable for them, and, so, they just don't deal with it. They just build around us. And this, unfortunately, has been true with almost all of America's infrastructure. The railroads, the electrical utility lines, the cell towers, everything has just gone around our communities and left this hole of infrastructure. And, so, we are hoping, praying, begging that this doesn't happen with broadband and that we are included in this national plan in a very positive and proactive way.

And some of the things that have been happening already in Indian Country that are very good examples of how you can do this and how it can work are threefold. I'm going to talk about tribal government self-determination, creative

financing, and federal inclusion.

From a tribal government self-determination standpoint, as in many of our communities, what's happening now isn't working, all right, and they're not reaching out to us, they're not building out into our communities, and, in fact, a lot of these broadband companies are saying that they're serving our communities in order to get grants, in order to have special status, and they're actually not serving our communities.

And, so, what you've had is by default, many of the tribal governments have created their own telecommunication companies. Unfortunately, it's not that many. Out of 560 tribes, we only have about 8 or 9, but where these tribes have created their own tribal communications has been extraordinarily successful. We have seen an average 85 percent increase in service gains.

One example is the Mescalero Apache. They went from about a 60 percent penetration rate for phone service to about 99 percent. And, so,

we've seen this be very successful in the wireline, in wireless service areas, and we're hoping to see this also within the broadband arena.

Tribal governments have incentive to serve their community and make sure that their people have access, and, so, where it might not be economically feasible or a really great business model for the private sector, that government's going to make sure that their community has access.

And, so, that has been one of the strongest models to ensure penetration in the telecommunications arena for tribal governments, is make sure that the governments themselves, that whatever rules we have in place, whatever grants we have in place, that the tribal governments themselves are empowered to create those telecommunication companies and provide those services themselves. That has been, by far, one of the most successful models thus far in Indian Country. And we are advocating to grow that model

across the board, including spectrum and frequencies and licensing, rights of way issues.

Across the whole board, the goal is tribal self-determination. The government knows what's best for its people and how to deliver it to its people, and it's going to make sure that those services are provided in a good way.

The second part of that is creative financing. Many of our communities are underserved because it's not necessarily a strong business economic model for a lot of the private companies out there, and this is sort of true for the governments, too, but the governments have public incentives. And, so, they have been very creative about the financing that they put together in order to provide these services from going to foundations to using the Lifeline and the Link-Up has been really instrumental, and we hope to see that expand into broadband. Quite frankly, no business model works in Indian Country without that subsidy. It just wouldn't happen.

They've done 911. One of the tribes in

South Dakota, the Ogala Sioux, has started their own 911. As far as I know, I think that's the only reservation in the United States that has 911 service. But that 911 service and the charge for that has helped subsidize the entire telecommunications system there on the Indian reservation.

They have gone and asked for a waiver of matching funds. They have asked for grants instead of loans through the RUS System. So, these are the only, by cobbling together sort of this creative financing structure, have we been able to provide any telecommunication services. So, that has sort of been the second really successful example of how you can do this in Indian Country, but it does take creativity, it does take flexibility, which the Federal Government, unfortunately, isn't always well-known for. But we continue to advocate to be very flexible in the financing aspects.

I have 13 seconds. Is that right? Okay. The third and final area of where we've

seen success in increased federal consultation like today. We very much appreciate being included on this panel.

In many subject matters, you can imagine within the Federal Government, tribal governmental voice is almost non-existent, and, so, when that happens, the policies, the procedures, the economic stimulus funds, all these decisions are made in a vacuum about what works best for Indian Country, and it ends up usually being decisions that are not appropriate for Indian Country because our governments are different, the legal structure is completely different, the constitutional relationship is completely different. It's not impossible, but it is different.

And, so, we continue to encourage consultation and committee. The FCC has started to become a leader in this area, and, for that, we're very grateful, and we are starting to see that trickle down to Commerce and Agriculture for the other aspects of communication, but we really

sort of do turn to the FCC to ask you to be our advocates with the other agencies that are still learning the differences both from a legal and a practice standpoint in Indian Country.

Okay, I'm done. I'm over. Sorry.

(Laughter)

MR. LLOYD: Thank you very much. Very, very useful.

One of the conversations that we've had off and on throughout the day, and I think almost throughout all of the workshops related to broadband and the FCC's broadband plan, it has to do with money and resources and the investment community, and, so, we really are privileged to have you, Jonathan Glass, to come here and join us and to provide us some perspective about best practices and what do you see from your firm and what we ought to be looking at.

MR. GLASS: Sure.

MR. LLOYD: So, thank you for joining us here today.

MR. GLASS: Thank you, Mark, for

inviting me to participate and inviting our firm to participate in this important panel.

My name is Jonathan Glass, and I'm principal with Council Tree Investors, and we're an investment fund devoted to increasing ownership in telecommunications media and other industries by minorities and women. While, at the same time, delivering returns to our investors.

Over the last two decades, our investment projects have included work with Latino, Native American, and African-American entrepreneurs. Business people with drive, creativity, intelligence, and, unfortunately, too often, a lack of access to capital.

And, as an example, we provided critical capital at the development stage of Telemundo, a Spanish language programmer, which, today, is owned by NBC, and then on a very local level, Garden State Communications, owner of WWSI TV in Philadelphia, we got it to be the first African-American-owned, full power TV station in Philadelphia, which provides Spanish language

programming.

Our philosophy is very simple, that diversity is good business. In our experience where there are untapped markets due to historically un-served populations, there's an opportunity to create new businesses devoted to those populations, and, out of that, new wealth and capital formation.

This taskforce must ask itself how can you spur investment in poor communities? How can the private sector help to address the disproportionately high number of broadband un-served and underserved people in particularly poor minority communities?

There actually is a simple answer if implemented, and that would have a major impact, and that is increase the level of ownership diversity of broadband service providers.

When the key assets for providing broadband services are owned by a diverse group, then those owners will tend to develop services tailored for the un-served and underserved poor

and minority communities. We at Council Tree can tell you this from experience. We've helped to build such businesses.

Diversifying ownership and attracting capital does not occur in a vacuum. It requires effective public policy. In Council Tree's experience, the most successful policy tool ever implemented to diversify ownership, attract capital, and spur investment in poor communities was the FCC's Designated Entity Program prior to the rule changes made in 2006. Essentially, the Designated Entity Program allowed today's small businesses and very small businesses prior to Adarand, specifically in minority and women-owned businesses, the ability to acquire spectrum and FCC auctions, either spectrum set aside or closed, only available to those designated entities, or with significant bid discounts.

We experienced firsthand how this policy created greater diversity of backgrounds of the owners of these licenses, and, in turn, innovation and better service to the un-served and

underserved markets.

For example, both Leap Wireless and Metro PCS began as DE licensees, and evolved into the Cricket brand, which I see all over Washington, D.C., which is very exciting, and Metro PCS brands, which disproportionately serve urban and minority communities.

In the broadband, to diversifying ownership of the next generation of wireless broadband licenses through a reinvigorated DE Program will help the FCC achieve the goal of increasing broadband service and uptake among un-served and underserved populations.

As this taskforce knows, wireless broadband is one of the key areas of future delivery of broadband. Wireless is really the way to get things out there, specifically where fiber isn't accessible and copper is not accessible.

So, specifically, the Designated Entity Program has the potential to once again be a key policy tool for achieving the FCC's broadband diversity goals. The FCC, however, must restore

the rules to their pre-2006 status in order to make the program work best.

I'll give a little background on this. In 2006, on the eve of the $14 billion Advanced and Wireless Services Auction, the largest spectrum auction at that time, then Chairman Martin changed the DE rules by increasing the regulatory burdens on DE licenses. The Commission doubled the amount of time a DE licensee must hold this license, and severely restricted the DE's ability to wholesale capacity of third parties. It previously did away with closed auctions among DE-only bidders, and instead had DE bidders competing with some of the largest corporations in the world for licenses. In other words, the DE licenses became more encumbered than their non-DE counterparts, and DE bidders were given less opportunity to secure spectrum.

What was the result? I know that Chairman Janikowski is very data-driven in his decision-making and wants the Commission to go that way. The data is pretty simple. Before

2006, just over 50 percent of the dollar value of licenses were awarded to designated entities, pretty significant. After those rule changes, the numbers plummeted to less than 3 percent in both the 2006 AWS Auction and the more recent 700 megahertz auction. And even more serious specifically to this panel, women-owned businesses won no licenses, and minority-owned companies won only 7 of 1,090 licenses. So, pretty significant decline, and that was just making those two changes.

So, and as I'm saying, I'm speaking as a private investor, saying that if these rules change, we'll get the flow of capital back into designated entities, and this will lead to more service, better service for the poorer communities and the minority communities.

To be fair, the Designated Entity Program, some people have voiced concern that it's vulnerable to abuse and it's constitutionally infirmed. Both of those arguments are without merit. Have there been abuses of DE rules in the

past? Yes, but, as a percentage of total DE licenses, such abuses were very few. Other FCC rules have been abused, but that doesn't mean we threw out those rules. That is why we have the FCC Enforcement Bureau and the courts. People who violate rules should be punished, but let's not punish underserved communities by throwing out the enabling DE rules altogether.

In terms of Adarand, I won't go too into it, because I see I'm almost running out of time or I have run out of time. But there was a D.C. Circuit Court that basically said in a ruling that the rules still stand for the Designated Entity Program. And, let's see. In fact, the Diversity Advisory Committee adopted a resolution to restore the DE Program to it's pre-2006 status just recently. And we think that it will have an incredible impact in the broadband context in terms of building new networks, new wireless networks.

Just a quick thing on Indian Country, we also see a significant opportunity there from an

investment standpoint. In terms of broadband, there definitely is a divide there, and we, today, are involved in a venture that has applied for a stimulus grant to provide satellite, middle mile service to Alaska and Hawaii, areas that have a very large Native populations and very un-served areas.

So, it's programs like those, it's focus grants, universal service funding for broadband in Indian Country, and a restored DE Program will go a long way to bridge the digital divide.

Thank you very much for having me, and we really are excited about this area, and think there is a great investment opportunity here, and we want to play a part of that.

MR. LLOYD: Great. Thank you, Jonathan. Really appreciate it.

Antoinette Cook Bush, not only are you a partner at Skadden Arps, you're in charge of the Communications Group there. You also chair the Diversity Advisory Committee at the FCC looking at broadband, and you're come up with a variety of

different recommendations from that committee about what the FCC should do, and you've really sort of helped lead this particular panel in pulling it together. So, I want to end at least the presentations with you, but please feel free to sort of figure out where you want to make sure the other panelists sort of pick things up.

MS. BUSH: Well, I want to thank you, Mark, for your leadership and taking this issue on, and to congratulate you on your new position at the FCC. It's really exciting to have a chief diversity officer at the Commission, and you're off to a great start.

And I also want to thank the Commission for holding these workshops. I mean, I know that for the Commission and all the staff that have been working on it, it's a huge responsibility. I mean, they've had, I don't know, Blair went through it the other day, but they've had hundreds of people come to the Commission from all different walks of life to talk about the broadband plan, and I really think -- and those

workshops are available via the Internet, on the FCC's Web Site, and it's really been a tremendous effort to reach out to the community, one that we've never seen before. So, thank you very much.

Mark did mention that I chair the Subcommittee on Broadband and Telecom for the FCC's Diversity Advisory Committee, and we did just last week have a meeting of our committee, and we did make recommendations to the Commission, and this panel is directly a follow-up on our recommendations. And I'll also note that some of my committee members are here, and I appreciate that and all of their hard work in putting this together.

We came up with a number of recommendations focused on enabling un-served and underserved populations and minority populations to have the ability to acquire and make effective use of broadband service. We had essentially four proposals. One was that the government should modify its existing Universal Service Fund, Lifeline, and Link-Up Programs, which are designed

to provide service for basic telephone service in underserved and low-income communities to expand it so that consumers in those communities would be able to use it acquire broadband service.

We also recommended that the government should look at similar programs that are in place for tribal communities and look at expanding the programs there.

We suggested that the government review the E-Rate Program, which provides affordable access to telecommunication services for schools and libraries with the idea of making sure that those entities, the ones that we have left, are able to provide broadband service.

For those of you who don't live in Washington, there's been a lot talk here about closing libraries, so, it's a sensitive subject.

The third proposal was that the government should consider incentives for adoption of Next Generation High-Speed Services at affordable prices.

And then our fourth recommendation,

which is directly related to this panel, is the government should partner with national and local organizations, such as some of those represented here, in communities and institutions to build awareness and foster demand. For example, these institutions could develop programs to assist people in leveraging their current technology devices, such as cell phones or PDAs, into broadband adoption and relevant applications.

And we also listed a number of organizations, some of which are here today, as examples of organizations that the government should work with. I think our thinking was and is that there are a lot of terrific programs in place around the country.

Congress has allocated significant funding to a variety of institutions, including NTIA and the Department of Agriculture or the Rural Utilities Service, and they're going to be giving out grants, and it's our hope that some of those grants will go to entities who have programs in communities that are working to enable them to

expand the reach of those programs rather than simply reinventing the wheel every time we just -- starting new programs, but look at what's already going on.

And the report, I'll put it in the record of the proceeding, our recommendation, and we also made a separate recommendation, which has already been discussed on the Designated Entity Program.

I did want, and, unfortunately, they weren't able to be here, either a representative from LULAC or La Raza because I did want to mention, for example, that LULAC, which is an organization focused on the Latino community, operates 57 community technology centers focused on the Hispanic community, and, so, that would be another example of a program that the government and the FCC could look to as they go forward.

And then I wanted to also mention the day we had our last diversity committee meeting, the Joint Center for Political Studies issued a report, and our committee is going to be taking a

look at their report, but there has been some discussion about cell phones here, and when we look at sort of the vast disparities, and they're very dramatic when you look at minority communities, the one place where they're not dramatic is in cell phone use. And according to the Joint Center report, in the United States today, 84 percent of white Americans have cell phones, 83 percent of African-Americans, and 89 percent of Hispanic. And, so, that's the one common area where -- actually, Hispanics exceed everybody else, but, in addition, it's the one area where everybody has access to the technology.

And I think that that's something that we would hope the FCC would look at as we talk about wireless deployment, the fact that cell phones have really penetrated across the country all demographics. There was discussion about the fact that we have prepaid services, Cricket, Virgin Mobile, others that offer low-cost alternatives that, given the penetration, we really ought to look at how can we use cell phones

to help advance broadband as we move forward.

And then the other area that I'd like to mention now that I'm completely out of time, and I'll just say it, but also looking at other kinds of things that advanced deployment. We talked about content.

What are content providers in this country doing? Black Entertainment Television, TV One, Telemundo. I mean, we've got a broad range of content providers, Univision targeting the minority communities. What kinds of ideas do they have about what we can do to help in this arena?

And then we also have other kinds of organizations. Is there a way that radio should be a part of this? Radios are now accessible on iPods. I think we really need to take a very broad look at what's out there and how we can use what's out there to help these communities.

Thank you.

MR. LLOYD: Great. Thanks, Toni. And, yes, time, it just sort of clicks away, doesn't it, once you start going.

MS. COOK: Yes.

MR. LLOYD: Patricia, where would you place education in terms of its value as an application to promote adoption by communities that seem to not be adopting advanced telecommunication services? And should we be looking at the problem of adoption in terms of how much does this promote solving the problem of education in this country?

MS. BRANSFORD: Well, education has had a major role in increasing access and adoption of broadband over the last 15 years. It's been the education that has been done by all of the non-profits that have been at the table.

Now, what we've also found that education and broadband work hand-in-hand in the sense that the more an individual uses broadband, the more educational opportunity they have. So, it's almost a multiplier effect in a way.

We are focusing on that 30 percent because that is what also causes the dropout rate in this country. We talked about the holistic

look at the gap, and we think that broadband technology, again, in the next chapter, can play a major role in a very strategic way looking at education and how it is provided in our schools, and why our kids are dropping out. I think that they're not engaged, the content is not relevant culturally.

We have developed the Youth Leadership Academy, which is now Web-based. We have demonstrated effectiveness in many different schools. Interestingly enough, sustainability is our big challenge in the sense that if we get a two-year grant to fund a project and we show results like kids (inaudible) or better and they're socially adept and they know technology and they're becoming leaders in the community XXX BEGIN TRACK MZ000225 XXX as soon as that funding ends, the school has to drop the project, and, so, it's really the sustainability of funding and being able to see things long-term and not in the small funding bites that we have today.

MR. LLOYD: So, Laura, I saw you nodding

your head. Is sustainability the problem, whether it's education or health care, whatever the community use is, and what's the --

MS. EFURD: Yes, sustainability is a key issue, but I just wanted to add a quick anecdote on the education issue.

We are putting in a wireless system in Evergreen public housing in Sacramento, and they have quite a few Hmong families. These are immigrants from Laos and Vietnam, and they would not let their children attend the technology training classes. And, so, the staff had to go and just really explain to them. They just didn't understand what it was about, what the value was, and once they said this is going to help your children's education, then they were all for it. Once they made that connection to education, it was a huge driver for allowing their children to participate in training.

But sustainability really is a key issue, and it was really interesting to hear Commissioner McDowell talk about capital markets

for entrepreneurs in broadband technologies, and I think what's even more difficult in the non-profit sector who are the key organizations that are trying to provide that additional assistance to get people connected to broadband, that capital markets there are even more broken.

All right, so, just as Patricia was explaining, it's based grant to grant to grant. There's no sustainable funding where someone can say I can take this community over 10 years and bring them into the broadband age because they don't know year to year whether they're going to get funding.

And that's what we experienced. We have $50 million 10 years ago to bridge the digital divide in California. There was no way we could do it with that amount of money. And started looking at well, how could we actually really begin to look at the markets in these underserved communities, build technology applications that they wanted to use, and be able to basically put those out in the marketplace so they can sustain

their programs.

And I think those are some of the key things, and my sort of call to the Commission would be to see what the White House Office of Social Innovation is thinking around a sustainability in general, and connect that to what's happening in the broadband plan, as well, to be able to seed some really innovative ideas to promote that in underserved communities.

MR. LLOYD: So, Toni, did you want to jump in there?

MS. BUSH: Well, it wasn't on an education point.

MR. LLOYD: Oh, no, but go ahead.

MS. BUSH: But I think it goes to the importance of having people educated and comfortable using technology, which was one of the previous panels -- and I can't remember who, I just know I didn't say it, but I heard it. One of the previous panels or workshops, somebody mentioned the fact that, amongst the large companies in America, it was a very significant

number, it was like 50 or 60 percent of them no longer advertise in the paper. That all of their job advertisements are done online. So, if you don't have access to the Internet, you can't even get a job.

And it's the same thing with cell phones. If you don't have a phone, I mean, there are a lot of issues that we don't think about, but how dependent we are on technology now, and for communities where there's high levels of unemployment, if you also have no access to the Internet, you won't even be able to find 70 percent of the jobs that are out there.

MR. LLOYD: Jonathan, one of the questions that keeps, I think, coming up particularly with regard to traditionally underserved communities, whether it's the disabled community or minority communities or communities in rural areas, is that the market simply doesn't support funding or investing in those particular communities, but Council Tree has made, I think, a business of finding ways to support those

particular communities.

Can you give some perspective about how you look at these markets? It may be a little different in the way other investors --

MR. GLASS: Yes. I think it's interesting. I was just jotting down here, and I think part of the answer is there really does have to be a public-private partnership in markets where it's uneconomic if there aren't enough returns. So, the government does have to step in, and we were very gratified to see the Stimulus Program and the $7.2 billion between RUS and NTIA being made available to bring broadband to these communities. The idea is that it's going to be hard to serve an area that isn't near a fiber line. So, you have to bring something to it.

Right now for us, we're very focused on satellite as a way to get out there, but without the government grant and government involvement, it just wouldn't work, and then, as I talked about the DE Program, a significant entry into the wireless area is the cost of a license. If there

isn't a DE Program where there are discounts given to small and minority-owned businesses, it's going to be very hard to get into those areas, but, on the other hand, as I said, it's very important for the ownership -- if the ownership is a diverse ownership group, it's also going to look to serve those markets where if it's not diverse, they're not going to serve those markets.

So, I think government has a very important role to play here, and we've looked at ways where you can leverage government capital with private capital to get returns for us as an investor, but, also, achieve the social goals that are very important that we need to see done.

MR. LLOYD: So, do programs like Lifeline and Link-Up support a sustained economic model, and is it sustainable enough for an investment firm to be interested?

MR. GLASS: Yes, I think so. One company that we looked at awhile back was a provider of wireless service to Native population in Arizona, and it was dependent on Lifeline

because, just given the density and the population in that area, it was impossible to get a return.

So, I think government, again, Lifelife is very important, and I think, Heather, you had said that we have to see Lifelife for broadband, as well, because, as Toni had said, wireless has really been evened out in terms of penetration and I think that, likewise, we have to see broadband somehow do that and part of it is the success of the DE Program and creating some companies that have really served this market and also made the product more affordable. Affordability is another key aspect of this, and how do we make this an affordable product for everybody?

MR. LLOYD: Great. So, we've got a couple of questions from folks in the audience. This is actually for Patrician Bransford. How would the digital campus work? I think you mentioned a digital campus. And how do you envision extending the educational resources to the home? Lack of in-home computers, Internet connections is obviously a challenge.

MS. BRANSFORD: Let's start with the digital campus. We think that one of the challenges in low-income, minority communities is being able to navigate the Internet. Children's Partnership said that, other organizations have said it, as well. And we believe that the solution to that is bringing the resources together in one portal, that homes can access. We need to make it user-friendly, and that that then would be, if you will, the ecosystem for our curriculum for education. That teachers can go there and produce their digital curriculum on the spot, that they can get resources in libraries and museums all over.

To me, it's like AOL was years ago. And then as the market matured, we didn't need AOL, but I think now low-income communities need a digital campus for education.

The other question had to do with home.

MR. LLOYD: Right.

MS. BRANSFORD: And that's a very important piece of it. In fact, we take computers

that corporations give us. Pfizer, for example, has given us up to 600, year-old computers when they laid off 1,800 people in New York, and we actually will deploy them in the home of students that are in our programs in the high schools.

One program I should mention is Get Healthy, Get Smart, which is in 40 schools. We reach 10,000 students. Parents are involved. We will give them computers for their homes so that they also can get access to the health education that we are integrating into the classroom.

This is being funded right now by Elton John Foundation, that is very interested in reducing the incidents of sexually-transmitted diseases. For our minority girls 13 and over, it's 48 percent at this point. That's a huge number, and it's really caused by not having education. And, so, this will be a way to get families involved to support what we're doing in the classroom. It's an absolute critical part of closing the divide.

MR. LLOYD: This is to Mr. Glass. When

wireless is taken as a key to broadband adoption, are you speaking about air cards used with laptops or do you believe cell phones or Smart Phones serve as a comparable conduit for broadband?

MR. GLASS: I guess I think Smart Phones and air cards and however you can access it, so long as you can get the content that you need. I think that's fine. I mean, I would hate to see kind of low-level cell phone Internet access as being the only way to access the Internet for poorer communities because my BlackBerry is not that good. I can only imagine that a regular cell phone is ever worse. So, I would want to see more of it, but I think we need levels of entry, and if that's the first entry point, that's great, but I'd like to see more --

MS. BRANSFORD: Robust.

MR. GLASS: Robust, robust access as part of it.

MS. BRANSFORD: Yes.

MR. LLOYD: So, and, Laura, you are funding folks to do work in providing broadband

services in some underserved communities.

What do you find as the most sort of frequent request for funds that you get, and what are people asking for and how do you decide what makes the most sense to fund?

MS. EFURD: Yes, so, I would say that the most request we get really is to support public institutions or non-profit organizations that are then helping these communities connect to broadband. We get a lot of applications for training, people on multimedia technology because, as I was saying earlier, really, in the last several years, the desire to connect to broadband has been a lot about being a content creator themselves. So, it's not just about sort of being a viewer of online content, but actually a participant and a contributor. So, I think that's been key. We really look at what's relevant for the community that they're trying to serve.

A project we looked at recently I thought was very fascinating in that they were looking at putting computers and laptops into

primarily churches. The previous panel won't like this, but in churches in remote areas of Hawaii that served predominantly Native Hawaiian seniors, and that this Hawaiian language content including the Bible and other kinds of things that they had translated into Hawaiian that were all online. For them to be able to access that content, and for a Native Hawaiian senior who wants to see more Native Hawaiian content, I mean, that was a huge driver for them.

So, I think we look at what is the relevancy? It may not seem the most logical, and I think that's a problem when looking at this from the federal level. There's a great desire to scale programs, and I think there are a lot of great programs that can be scaled, but there are a lot of programs that have to be really targeted to the community that it's going to serve and be relevant to that community, and that doesn't always lend itself to scale in a large way, but to serve that niche in that community. So, I think that's probably the largest factor that we

consider.

Just one point on cell phones as an entry-level point. We have a project that we're investing in called EDTEXT. So, it's all about texting so that teachers can text to parents because that's the kind of technology that they have, and I think even at that point, as the parents are getting used to communicating with the teachers via text, it just gets them in that mode of oh, this is important, I need to do this, and then the next level would be can we help them get a computer at home so they can actually connect via e-mail and other things like that.

So, I do think there is something about that entry point, I think a lot more demonstration programs need to be funded in that particular area.

MR. LLOYD: And, Heather, there's a question about the range of Native American adoption of both telephone and broadband service in that there's such a variety among Native American both tribes and whether they're in urban

and rural areas. We have some very wealthy Native American tribes and we have some very poor Native American tribes.

When you look at what's working in the Native American community, is there a connection, is there a correlation between what's working is working for a tribe that has money and it's not working for a tribe that doesn't have money?

MS. EFURD: That's a great question. I think like any community, if you have money, it's easier. There is a misperception though that a large percentage of our communities do have money, and out of the 564 tribes, there are probably only about 40 or so that are the ones that you see on the TV that have really large incomes due to their economic endeavors. We're hoping the other ones are the on the way.

With that said, a lot of our impediments in addition to the income levels, which applies across the board, are the physical remoteness that we've been talking about. Even if you start to make a little bit more money, you sort of come up

in those ranks.

We're still so isolated in Alaska, in the Great Plains, that we continue to have these barriers to build out from the private companies. So, those continue to still be there, and until the governments and the Native- owned companies are empowered to sort of do it themselves, we're probably going to continue to see that.

We also have similar cultural barriers as far as adoption. Not all of our community speaks English, and until some of the content that's available is going to be more particular to those communities, it's going to continue to not be valued as a high priority. A lot of people in our communities don't see the value to them. They are both physically isolated and also, quite frankly, emotionally and sort of socially isolated from the rest of the United States, as well. So, unless it's in their language and perhaps it's teaching them something that's relevant to their community or to their kids, it's not going to register with everybody immediately as being a

high priority for them. Especially when it's expensive.

MR. LLOYD: Wow, very interesting. We have a question here. There's a comment about broadband and national competitiveness. The U.S. is behind other countries in broadband adoption. Looking at the examples of what works here, is there anything that you see that might help the U.S. sort of catch up with Iceland, or do you know?

MS. BRANSFORD: Yes, that was a chart that I have in the handout.

MR. LLOYD: Yes.

MS. BRANSFORD: And, in fact, it shows the United States ranked 18 among developed nations, and that's down from 15 two years ago. So, we're sinking, and this is, I would call it, a national crisis. And it really actually comes from, again, not looking at that classroom as a place to integrate technology.

What other countries are doing differently, first of all, they are motivating

teachers to see the benefit of technology. This is a national mandate, by the way. It's not necessarily market forces working here. Using technology aggressively for teaching and learning. Invest in equipment for schools and in training teachers to use the technology, and I would add here to put in homes to support what's going on in the classroom.

And, finally, the other countries are providing all schools and students with the same opportunities, and, so, you don't have that diversity based on income. We have very poor schools in the United States that are producing dropouts.

I have heard that a child that comes in, it could be a gifted student who comes into one of those warehouses or factories, dropout factories, drops out, and, so, we need to go and seriously look at those schools that need to be integrated with the tools that we know will work because other countries are doing it, it works in those countries, and we're sinking, and it's a crisis.

MR. LLOYD: We have a question here for Toni. Universal Service Funding money has been deployed since the 1996 Telecommunications Act to schools and libraries in the billions.

Would it be helpful to ascertain the current status of Internet connectivity to those awardees so that the government knows what schools and libraries need additional funds or where broadband can be deployed quickly and efficiently.

MS. BUSH: Makes sense to me. I have to admit, it's not my area of expertise, but, you know, my assumption is that actually as part of the broadband mapping plan, that that is one of the things that's going to be done because it's going to be looking at, you know, how broadband is being deployed.

And I also know that the FCC conducts audits of the programs, the E-rate program, and has been doing that. And so I think that, yes, that's very important, and also at, you know, some level, looking at sort of qualitatively, you know, what works and what doesn't work, not just who,

you know, has been connected and who hasn't, but are there ways of doing that or places that have proved more effective or less effective that I think we should be looking at.

MS. EFURD: Mark, I would actually - I totally agree with Tony. I would add to that also, what would be really helpful is to get a picture of also what the connectivity is among other non-profit institutions and community anchor institutions, whether they're community health clinics or, you know, local economic development organizations, you know, small social service agencies serving immigrant populations, because that's where a lot of people connect to first and that's where they're going to learn about how they can utilize the technology and bring it into their home and use it, but a lot of those institutions themselves are barely connected, you know, they're all running everything off of one DSL line, and they, you know, they can't do all the work they need to, so I think that would be another important aspect to look at.

Because there's sort of this, you know, this layer of infrastructure in our country that's sort of disconnected, and we don't have a good picture of what they're doing, but they're providing so much to these communities.

MR. LLOYD: So --

MS. BUSH: I was just going to say, I would say one other thing that I think we ought to be looking at, is that when we look at, you know, the fact that, you know, applications and content is often a driver, you know, what kinds of content are lurking and what lurks in different communities, you know, with first seniors.

I mean, you know, my mother is like an avid bridge player on the internet, she may never respond to your email, but she's got that bridge down. And so I think that, you know, we do need to get an assessment of, you know, what are the actual applications, you know, and I think we can get, you know, information. There's a lot of applications that, you know, wireless providers are using now that ISP's and others are providing

to subscribers, you know, just to get a sort of feel for them, like how many people are, you know, spend, you know, how much time playing games, doing research, you know, so what are, you know, those people that have it, you know, what are they looking for in helping us decide what areas we should be looking at.

MR. LLOYD: We had a question that was for an earlier panel that I put to the side because it actually seemed like it might actually be better asked to this panel, and that is, once you make sure everyone is connected with broadband, what's next? How you give an incentive to the underrepresented and underserved American citizens, not just consume the technology, but become participants, and how do you teach them to produce with broadband? So anyone want to --

MS. BRANSFORD: I just think we've got models that we're running right now where we see students actually taking over. If you give them the tools, they will use those tools. We had a graduation ceremony and we had a teacher get up, a

six foot man got up and said, you know, approaching the subject of sexually transmitted diseases was very difficult for me, but I knew I had to do it because the education is important. I put those tools out there to the students, I gave them the interactive exercises, they took over, they led the class. And so I will say that they're more adept really than I think most of our adult teaching staff, and we're - by the way, that's all converging, as well. But I don't think we have to worry about students really beginning to create, that's my feeling about that. What do you think?

MS. EFURD: I totally agree. I think the question is a little - it's almost backwards, because I think it's - once people know what they can do, they want to participate, they want to be active in their community and use the internet to connect with civic engagement activities and advocacy, they want to do that, or they want to, you know, put all their pictures up on Flicker or connect with their relatives via Facebook.

So I think that, you know, it really is opening those doors, both from a perspective of providing the access making it affordable, but also having them learn. This is what the opportunities are. And then I think from there, I don't think any of us can predict, you know. I just think there will be some really interesting innovations that happen in communities that you didn't think would happen, you know.

The great thing about underserved communities is, they're really used to doing a lot of very little, and so there's a lot of innovation going on, and so I think once you sort of give them that boost, you know, amazing things will happen.

MR. LLOYD: So, Heather, you looked like you wanted to jump in there, as well.

MS. THOMPSON: I just wanted to, you know, reiterate I think - I agree with what you've both said on this instance, and people are hungry to participate in this. And I think, you know, one of the things within the native community that

people are most excited about is to be able to stay in our nation.

I mean look at me, I live in Washington, D.C., it's very hard, our unemployment is 90 percent where I'm from in Cheyenne River, there are very limited job opportunities, and so to be able to have this type of access and start businesses at home and empower your community, I mean people are just chomping at the bit to open up this broadband and get going and to be able to empower from within.

MS. BRANSFORD: I would --

MR. LLOYD: Please, go ahead. So, Jonathan, did you --

MR. GLASS: No, I may just - I guess the point is that, you know, in that case, it really is about getting the networks to reach those markets. And there are many things that we're talking about, but I mean that is I think -- number one, to get the numbers higher is to get networks built, and number two is to get people to adopt, which, you know, I commend these

organizations for doing that, I mean I think that's key, and that helps business, too, if people are adopting, so --

MR. LLOYD: Sorry, Patricia, go ahead.

MS. BRANSFORD: I was just also going to put up another plug for a mandate. We've seen No Child Left Behind really take off. I know New York just spent tens of millions of dollars putting together an administrative system to track schools for No Child Left Behind, but that is the measurement system, that's an administrative system. It doesn't really help those 50 percent kids who are dropping out. And so they have the same mandate for education, for instructional technologies. We would see that 30 percent collapse. And I think we would get very close to 100 percent graduation. I mean I - that's my dream at least, that, you know, I am really passionate about that 30 percent, which - the 30 percent that isn't adopting, but the 50 and over that are dropping out of school, I think if we can bring those kids in, we will see this gap, you

know, now. So I'm for the mandate, I'm for a No Child Left Behind.

MR. LLOYD: In broadband?

MS. BRANSFORD: In education.

MR. LLOYD: Yes.

MS. BRANDFORD: Real - children.

MR. LLOYD: So, Tony, I'm going to ask you if - let's sort of pretend that Blair is sitting right here and he's saying, all right, so all this is great, we're hearing all these wonderful things that are going to happen with broadband, and folks are going to connect, and folks are - what is the takeaway for the broadband team regarding what they should put in that plan and what they learned from best practices? Is it that there are best practices out there and the government should just continue to fund them, is it - like what's the takeaway for them?

MS. BUSH: Well, I think the takeaway is that - what I, you know, in my dream world I think that the broadband plan would recommend to Congress that they identify programs, you know, in

communities that are working now, and you know, and expand those programs, you know, and that they, you know, say, okay, we've got, you know, these programs that are, you know, deploying broadband, that are providing education and training, you know, in these communities, and let's expand them and try to replicate them in other communities since we already have the model in place to do it, and that, you know, I think that's where I would, you know, that would be my recommendation.

MR. LLOYD: And it may have been you, Patricia, but there was someone who mentioned best practices outside of the United States. And I know that we've got a recommendation from Congress to come up with a set of metrics I think regarding deployment, and to measure that versus what other countries are doing. Do you have any sense that we've got a sense of the best practices in other countries?

MS. BRANSFORD: Well, that's not a field that I have any information about. But I think it

is a very good idea to begin looking at what is it about other nations that they are successful in graduating students, in increasing the quality of education and health through education, and preventative medicine, and we are not able to do that, because we've got this barrier that stands between the U.S. and the distribution of information and education, and that's the lack of broadband. We're not using it strategically, and that, for me, is the main thing.

I think it's great to look at all of what the communities are doing in neighborhoods, you know, but I think a national mandate to actually look at education, compare it to other nations and come up with some metrics is really I think the way to go. And then we'll include teachers, all teachers, all principals, all students, they'll all line up and be universal users of broadband.

MR. LLOYD: So the same question.

MS. BUSH: Well, I just was going to say I don't completely agree, because I think that,

you know, too much emphasis on what's going on in other countries can sort of distract us from what we're doing here. And I think we have to realize that a lot of the countries that are listed as ahead of us are very different, they're much more homogeneous, they're small in population, they've got more money, you know, there are a lot of other factors I those countries that, you know, we just can't duplicate that, and that it's not, you know, going to be realistic for us I think to spend too much time on that.

I think - and it's not to say that only focusing on sort of community programs is the right answer, but I do think what you're saying about the importance of a broadband mandate, I think it's important that that is going to be key, you know, and that we have a realistic plan that's funded for implementing whatever is decided. I think that's, you know, going to be the key to it.

MR. LLOYD: Yeah, I think that makes an awful lot of sense. Despite that, I am going to ask Heather, do you know anything about what

Canada does in its treatment of indigenous populations, and is it different from what we do here in the U.S., with regard to providing telecommunication services?

MS. THOMPSON: It's a great question and I don't know the answer to it. We have very similar legal structures with Canada, as far as the tribal government and the governments having jurisdiction over their lands, and therefore, the federal - the tribal governments having jurisdiction over their lands, and therefore, the federal government deployment plan having to take that jurisdictional situation into consideration. And, in general, Canada has a better relationship, I hate to say that, the Canadians are probably going to be very mad at me, but in general, they actually do have a somewhat better relationship with their tribal government, primarily because they have a built-in constitutional protection that are a little bit stronger.

So I'm not even going to guess as to how that is applying to the broadband arena, but I

imagine there are a lot of similarities and it would be worth looking at.

MR. LLOYD: Very interesting, okay. Should a broadband school be created for students who dropped out, let's see, in low to moderate incomes? Considering access now is 600 to 1,500 per year per house; what price would have major increase in use, broadband school? No, no takers?

MS. EFURD: I think every school should be a broadband school.

MS. BUSH: I mean I think that it's something that, when we're looking at it, we also have to sort of look at it in the context of, you know, that community's educational system, because, you know, the one thing we also know is that I mean simply having access to broadband by itself is not going to be enough, and that, you know, there's parent training involved, there is, you know, there are - people have to be involved to help the students deal with the many issues that they have in their lives that are not just, you know, lack of money, but, you know, typically

they are faced with a lot of challenges, and that is has to be - it's an important part, but it has to be part of a more comprehensive program that's focused on educating kids in low income communities.

MS. EFURD: I would add to that, Tony, that we don't fund directly schools, but we fund a lot of after school programs who work with kids who are particularly - who has - may have been dropped - dropped out of school at one point. And what we found is that the broadband applications, the ability to really do video and be able to share that with people and to tell their story really does help them in a number of ways. It's therapeutic to some extent because they can actually really explain what their situation - I mean some of these kids, it's amazing, the violence that they see every day and they have no outlet of how to communicate that and what that means to them and what that means to their community. So the ability to do that and the ability for them to share that and have people

actually watch it on YouTube or whatever and get that validating feedback is huge in terms of their motivation to move on.

So I think, you know, these opportunities that these new technologies have for kids really is quite amazing. There's a school in Sacramento that actually they do a video journal every day, I mean they're using all of these different applications and connecting to each other via broadband, and you know, how amazing would that be if that happened in every school in the nation and that they had access to this kind of technology.

MR. LLOYD: Okay. Heather, please.

MS. THOMPSON: I just wanted to sort of put on the radar screen for the FCC staff who are working on these education issues that it's a little bit different in Indian country. Our school department is the federal government, it's the Department of Interior. I think other than Department of Defense, we're the only other federal school board, you know, school out there.

And so it's a little bit complicated and difficult because as these funding programs go forward, the funds are actually not often available to other federal agencies, and so they get left out of these growth areas, like Telecom. It's the same thing for our health services, our hospitals are the Federal Indian Health Service, and so they're often not eligible for a lot of these programs that are moving forward and they don't get funded through Congress for these specific initiatives, so we end up having these holes in our hubs.

So it's interesting to hear the conversation about, you know, funding community hubs, ours is the Bureau of Indian Education and the Indian Health Service, and even our tribal government building is the Federal, you know, is a federal building. And so it's an odd thing to be advocating for other federal agencies to receive funding, but, in essence, that's the extension of the tribal government, and so it's just something interesting to keep in mind.

MR. LLOYD: Very interesting, all right.

So are there any other - well, we have a question here about civil rights organizations in the U.S. and whether or not those organizations really understand the importance of broadband services. I don't know if I would ask - put any of you guys on the spot with regard to that question. But I think we've sort of exhausted at least some of the questions for the panel. Tony, were there some sort of closing thoughts that you had about some takeaways here?

MS. BUSH: Thanks for putting me on the spot. Is that you or do I have a closing response? I think that one major takeaway is that there are a lot of people doing a lot of work on these issues around the country, and that we have unique challenges that are being faced by many communities, but probably none quite as unique as what's facing the tribal communities, because of their relationship with the federal government and the other issues that Heather I think has really articulated very well today.

And I think that we see that there is -

I feel that there is a lot of hope and expectation as a result of what the FCC is doing, what Congress has done, and this emphasis on broadband, and the, you know, I'm actually very optimistic also because, you know, there's a tight deadline on everything, on giving out the grant money, on pleading the broadband plan that, you know, things are really moving forward, and so I'm just, you know, want to say that I think that if there's anything we can do further to help the commission as you try to, you know, distill all this down, you should let us know.

MR. LLOYD: Well, thank you all again. And as I said, I think at the beginning of the day, this is really just the beginning of the conversation, this is not the end. If there are any written remarks or comments or follow-up that you want to do to make sure that we get on the record, we'd love to have that.

We hope to continue this conversation, but I think the recommendation regarding focusing on the best practices, what really works out

there, finding a way to fund them, to keep them sustained, has been heard here, and again, I just wanted to thank you all for coming down and sharing your time. Thank you.

(Whereupon, the PROCEEDINGS were adjourned.)

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I, Carleton J. Anderson, III do hereby certify that the forgoing electronic file when originally transmitted was reduced to text at my direction; that said transcript is a true record of the proceedings therein referenced; that I am neither counsel for, related to, nor employed by any of the parties to the action in which these proceedings were taken; and, furthermore, that I am neither a relative or employee of any attorney or counsel employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.

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